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*Great Battles*

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**CHINA RESISTS**
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**THE HISTORY OF EXPLOSIVES**
14 PAGES OF GRENADES

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# WW1 Ambulance Train Pack

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**Contents:**

- **GWR 3700 Class No. 3711 WW1 khaki livery**
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# Welcome

## "The Falklands War is an undertaking that simply awes"

The story of a superpower in deep crisis, a navy that had been sacrificed on the altar of budget and a prime minister facing unrest at home and isolation abroad, few analysts in 1982 would have put their money on the British government mounting a campaign to return sovereignty to the Falkland Islands, let alone a successful one.

Amazingly they succeeded in spite of limited resources, vast distances and tactical impossibilities. Before the first army-issue boots hit that wild heath, Britain's military machine had a different battle to win – a battle for policy, logistics and technology that would give the men on the ground a fighting chance at driving the Argentineans from the islands.

That's the story we uncover on page 28 and I think it will leave you as appreciative as I by the sheer close-run thing that was Britain's impossible victory.

James

**James Hoare**
Editor in Chief

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## CONTRIBUTORS

**FRANCES WHITE**
As Staff Writer on our sister title **All About History**, Frances is perfectly placed to tackle a whole range of historical periods. This issue she delves into the origins of the Vietnam War, revealing what you don't know about the roots of this devastating conflict.

**JACK GRIFFITHS**
History graduate Jack has tackled the full spectrum of military machinery this issue, from the tactics and siege equipment of the Roman legions (page 56), to the awesome power of the Tiger I tank (page 86) after his visit to the Bovington Tank Museum!

**NICK SOLDINGER**
Nick is a seasoned journalist with over 20 years' experience and a voracious appetite for history. After delving into the dark realms of the Waffen SS last issue, he has returned to unpack the logistical genius that won the Falklands War.

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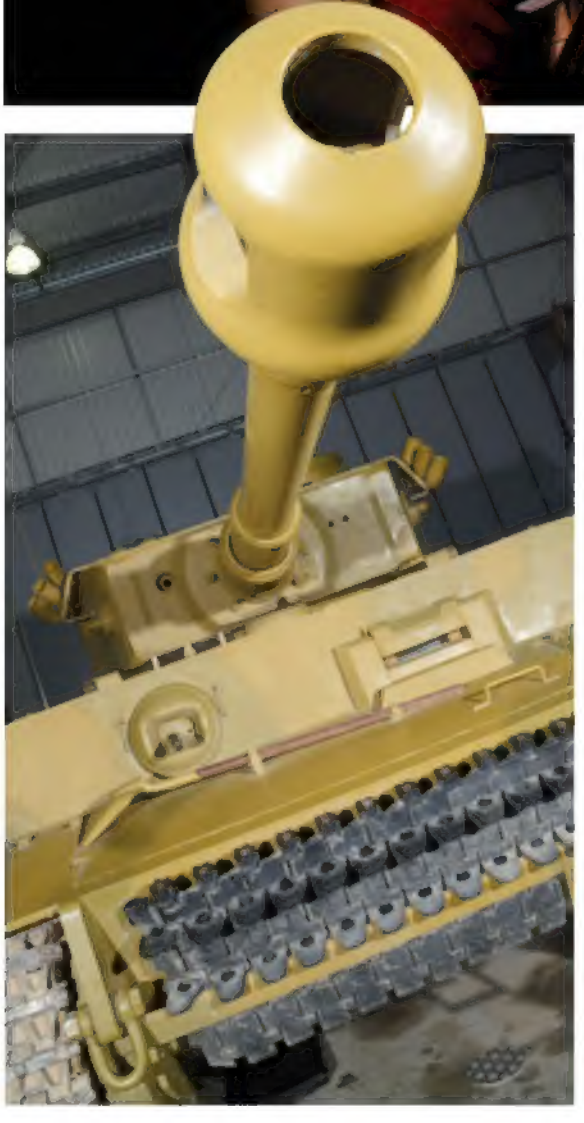

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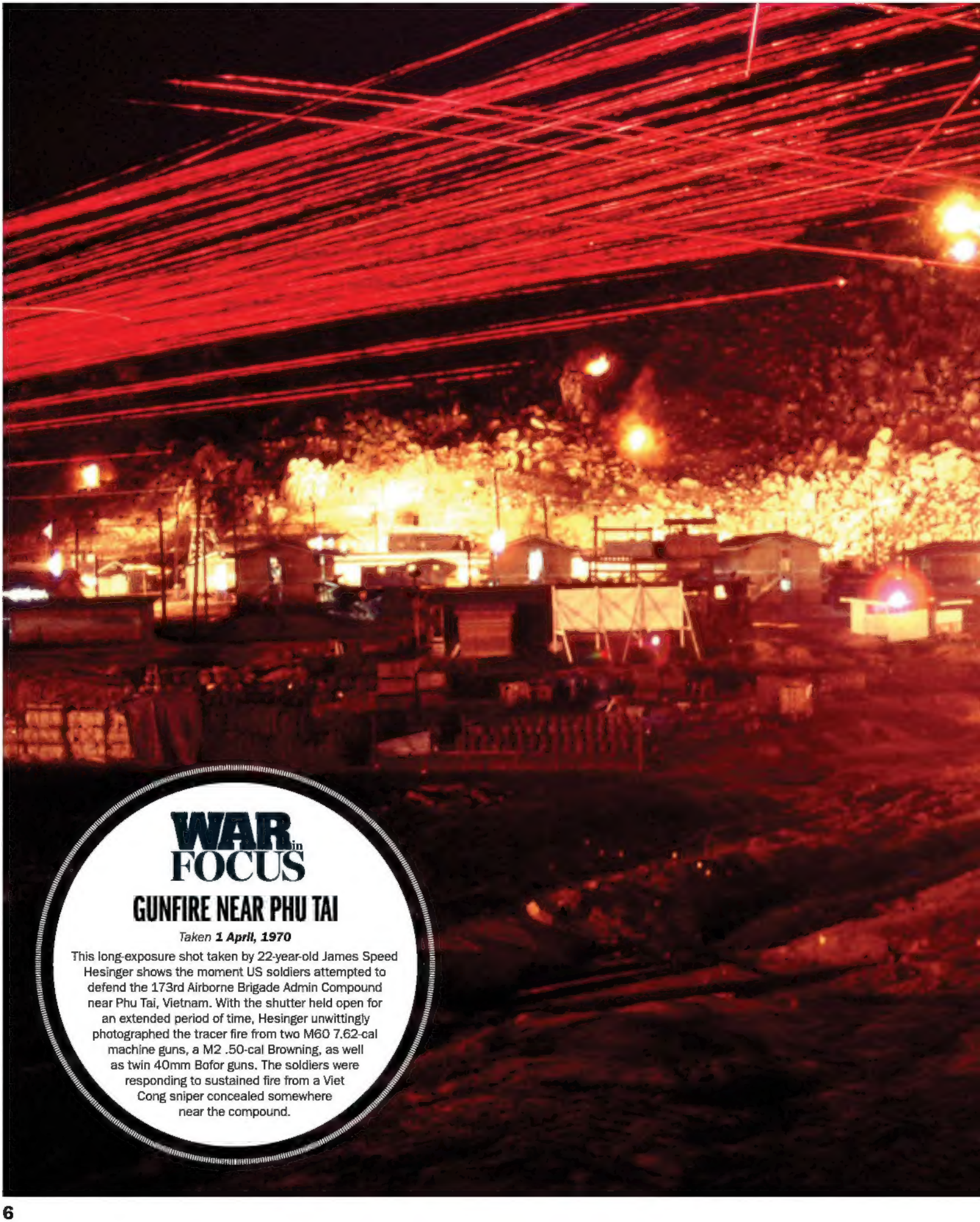


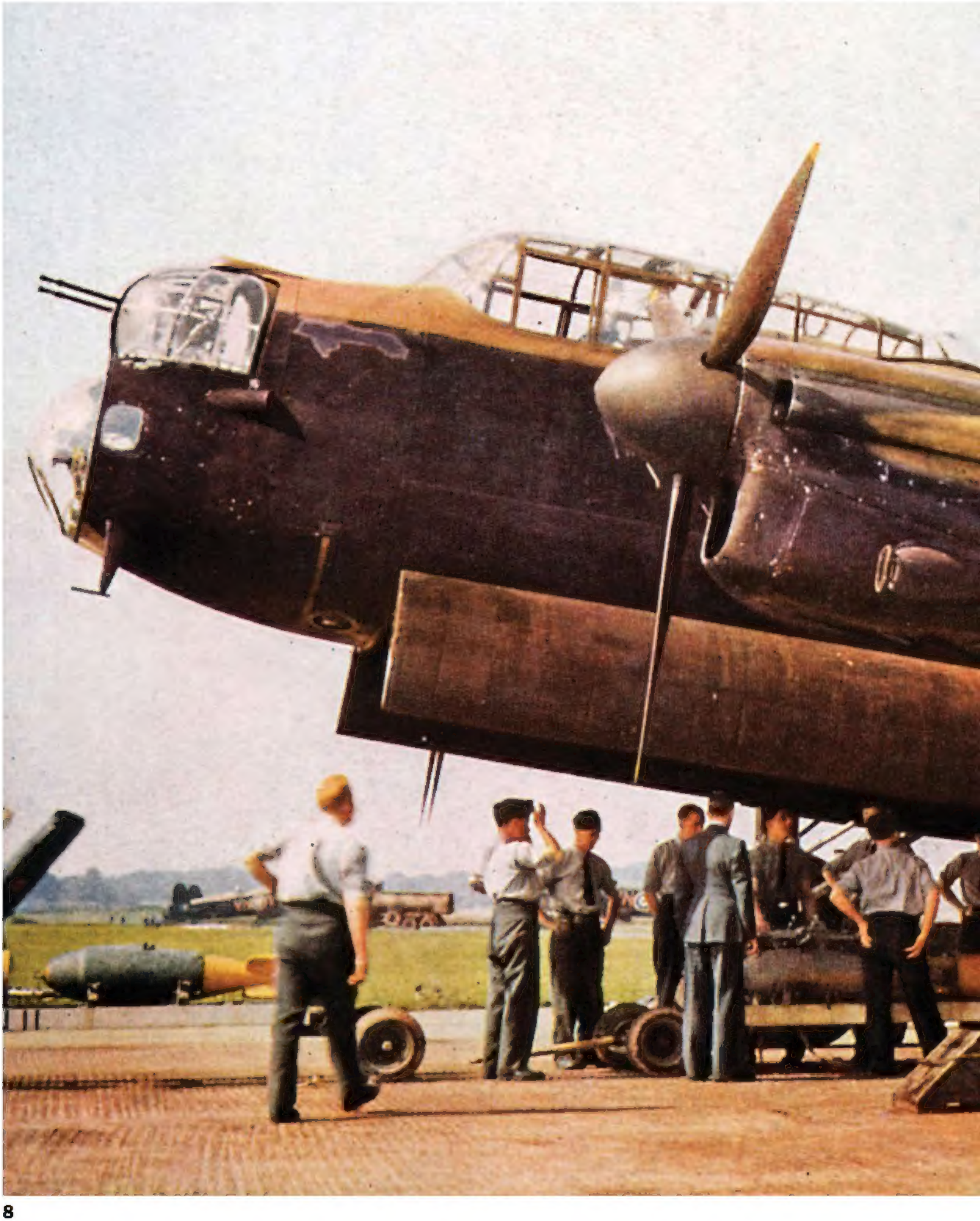
WAR in FOCUS

## GUNFIRE NEAR PHU TAI

*Taken* ***1 April, 1970***

This long-exposure shot taken by 22-year-old James Speed Hesinger shows the moment US soldiers attempted to defend the 173rd Airborne Brigade Admin Compound near Phu Tai, Vietnam. With the shutter held open for an extended period of time, Hesinger unwittingly photographed the tracer fire from two M60 7.62-cal machine guns, a M2 .50-cal Browning, as well as twin 40mm Bofor guns. The soldiers were responding to sustained fire from a Viet Cong sniper concealed somewhere near the compound.

Rex Features



WAR in FOCUS

## DEADLY PAYLOAD

*Taken* ***c. 1942***

The Avro Lancaster heavy bomber was capable of carrying 22,000 lbs of bombs, with which it could travel 1,500 miles. No. 44 Squadron conducted the first bombing raid to include Lancasters, targeting the German industrial town of Essen. During the course of the war some 3,350 of the planes were destroyed by the enemy, resulting in the loss of thousands of brave crewmen. Today there are only two remaining Lancasters still able to fly.

Alamy

WAR in FOCUS

## BLASTING GADDAFI

*Taken* ***17 September 2011***

The Battle of Sirte is considered to be the last major conflict in the Libyan Civil War of 2011. The village of Sirte was known to be among the last strongholds held by supporters of Muammar Gaddafi, and its eventual defeat to anti-Gaddafi fighters all but spelled the end of the war. The village was all but destroyed in the battle, which raged from 15 September to 20 October. Gaddafi was captured, possibly tortured, and killed after rebel forces successfully stormed Sirte.

WAR in FOCUS

## THE BATTLE OF SCHEVENINGEN

*Painted* ***1808***

Painted by Abrahamsz Beerstraten some 150 years after the event, this depicts the decisive battle of the First Anglo-Dutch War. After defeat off the coast of Suffolk in June 1653, the Dutch fleet had been forced back into its port. Pursuing were over a hundred warships under George Monck, which proceeded to blockade the Dutch coastline and cripple the country's economy. On 31 July the Dutch fleet attacked the blockade, but the English fleet proved the victor, effectively ending the war.

# GRENADES

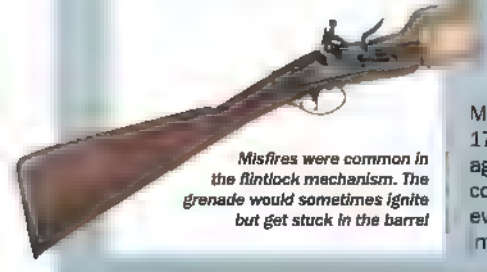
From Ancient Greek fire, to the modern M67, grenades have provided a tactical edge on battlefields throughout the centuries

## FLINTLOCK HAND MORTAR *1760*

***SEVEN YEARS' WAR, MANILA***

**Country PHILIPPINES**

A primitive type of grenade launcher, the hand mortar fired grenades with increased range and power. A soldier would light the fuse himself before shoving the bomb into the barrel and pulling the trigger. The mortar was propelled by gunpowder and first used in the Siege of Manila in 1762 and the Seven Years' War (1756-1763).



*Misfires were common in the flintlock mechanism. The grenade would sometimes ignite but get stuck in the barrel*

## SAFETY AT LAST *1961*

***A SAFETY CLIP, 1,200 YEARS ON***

**Country USA/Vietnam**

A safety pin had been attached to grenades since the early 20th Century, but only in 1961 was the safety clip introduced. Nicknamed the jungle clip, it stopped grenades accidentally going off by the dislodging of the safety pin, especially by jungle growth in the dense tropical forests of Vietnam.

## GRENADIERS

***17TH CENTURY***

***ELITE TROOPS THROWN INTO THE HEAT OF BATTLE***

**Country Britain & Europe**

Soldiers tasked with throwing grenades had featured in warfare since the 14th-Century Ming dynasty. However, the 17th Century saw their golden age, where a special grenadier company was included in nearly every frontline regiment, evolving into a specialist assault force.

*Removing the safety pin would give the soldiers four seconds to throw the grenade to a safe distance.*

*Battalions of grenadiers would lead assaults, such as this Prussian one in 1745.*

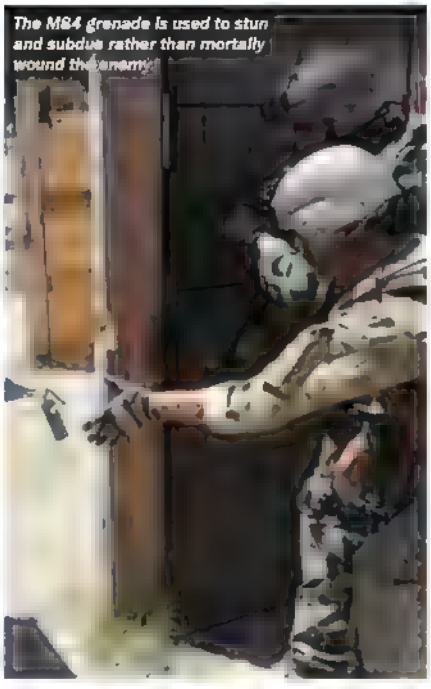
Molotov cocktails have been nicknamed 'the poor man's grenade' due to their easy assembly

## POOR MAN'S GRENADE 1939

***A DRINK TO GO WITH THE MEAL***

**Country Finland**

The Molotov cocktail got its name in the cold Finnish winter of 1939 to 1940. Soviets had dropped cluster bombs on Finland, named Molotov bread baskets after the Soviet foreign minister. The Finnish soldiers sarcastically named their bottled petrol grenades 'Molotov cocktails' in response, "to go with the meal." The name, like its contents, stuck



The M84 grenade is used to stun and subdue rather than mortally wound the enemy

## FLASH-BANG 1995

***A STUNNING EXPLOSIVES DEVELOPMENT***

**Country USA**

The M84 stun grenade was developed as a less-lethal option to the standard frag grenade. On detonation it leaves the targets blind, deaf and disorientated, enabling them to be easily subdued in the event lethal force isn't an option.

## 5 Facts about GRENADES

### NO SHOUTING ALERTS

Contrary to what Michael Bay would have you believe, a grenade toss is usually not accompanied by a booming shout of "fire in the hole", but the simple showing of the grenade to friendly forces as a warning before throwing.

### A DISTANCE AND A HALF

The German potato-masher grenade had a long wooden handle. Not only did this improve the soldier's grip on it, but its swinging motion in the air could also propel it up to 50 per cent further than a regular grenade.

### A SYMBOL OF HONOUR

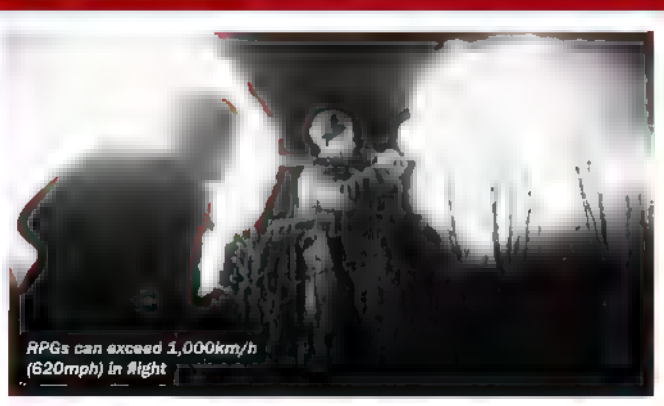
Grenade symbols sport many military uniforms and insignia across the world. The Spanish artillery arm uses a flaming grenade as its badge and the Finnish Army Corps of Engineers' emblem features a stick grenade, for example.

### GET A GRIP

The iconic 'pineapple' pattern of grooves on many grenades is not to help them fragment, but in fact to help the soldier throwing it be able to grip it more easily, helping to throw it further

### TURN UP THE HEAT

White phosphorous incendiary grenades used by the British forces in WWII burned at a temperature of 2,800°C (5,700°F), which is so hot it would even boil and evaporate gold.



RPGs can exceed 1,000km/h (620mph) in flight

## ROCKET POWER 1940

***BRINGING THE HEAT AGAINST TANK WARFARE***

**Country Russia**

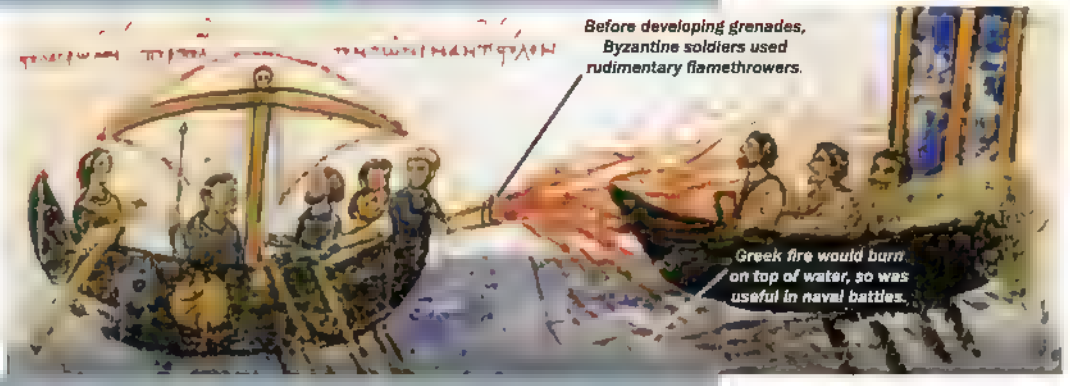
As the tank was developed, so was a weapon designed to fight it. The rocket-propelled grenade was more aerodynamic than other grenades and designed to pierce tank armour. With HEAT (high-explosive anti-tank) rounds taking down hundreds of tanks in WWII, the RPG was here to stay.

## FIRST GRENADE C. 750

***THE GRENADE IS BORN***

**Country Byzantine Empire**

After mastering the use of Greek fire – a sticky, liquid fire especially useful in naval combat – the Byzantines' decision to package it in neat stone or ceramic jars and throwing them at the enemy gave birth to the first incarnation of what we know as grenades today



Before developing grenades, Byzantine soldiers used rudimentary flamethrowers.

Greek fire would burn on top of water, so was useful in naval battles.

National Army Museum/Corbis

Frontline

# GRENADES AROUND THE GLOBE

Your guide to the use of grenades around the world

**Ketchum grenade**
Date: **1861**
Speciality: **Trench warfare**
Location: **North-east United States**

**No 1 grenade**
Date: **1908**
Speciality: **Trench warfare**
Location: **Great Britain**

**Mills bomb**
Date: **1915**
Speciality: **Fragmentation grenade, effective in trench warfare**
Location: **Great Britain**

**Cast-iron bombshells**
Date: **1467**
Speciality: **Setting enemy camps and forts on fire**
Location: **Europe**

**Petrol bomb**
Date: **1936**
Speciality: **Improvised explosive, highly flammable**
Location: **Spain**

**Model 24 Stielhandgranate**
Date: **1915**
Speciality: **Stick grenade, effective in trench warfare**
Location: **Germany**

**Liquid fire grenades**
Date: **c. 750 BCE**
Speciality: **Consuming enemies in sticky fire**
Location: **Greece**

## AMERICAN MILESTONES

**Tear-gas grenade**
Date: **1919**
Speciality: **Chemical gas grenades, used for riot control**

**Mk 40**
Date: **1966**
Speciality: **Concussion grenade used against enemy frogmen and divers**

**Mk1 Mod 0**
Date: **1943**
Speciality: **Illumination grenade with a magnesium filler**

**M61**
Date: **1961**
Speciality: **A safety pin prevented accidental detonation**

**M84**
Date: **1995**
Speciality: **Flash grenade, used to disorientate and stun enemies**

**Stinger grenade**
Date: **2000s**
Speciality: **Riot control, especially in prisons**

## 1 THE WINTER WAR

**FINLAND 1939-1940**

In the Winter War, Finnish soldiers use improvised petrol grenades like those used in the earlier Spanish Civil War. They named them Molotov cocktails in mockery of the Soviet foreign minister Vyacheslav Molotov.

## 4 AZAMARA JOURNEY INCIDENT

**OFF THE COAST OF SOMALIA**
26 NOVEMBER 2012

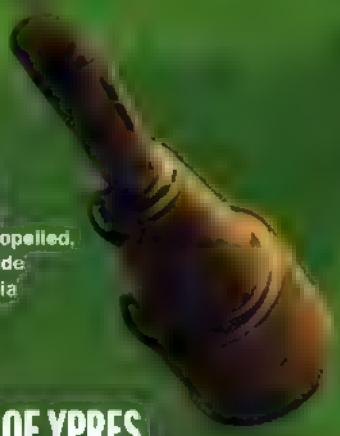
Somali-based pirates attack cruise ship Azamara Journey 260 nautical miles from the Somali Coast, using rocket-propelled grenades. The ship narrowly escapes and a German EU frigate catches and arrests the pirates.

## 5 THE IRAQ WAR

**IRAQ** 2003

Coalition military vehicles in Iraq find themselves frequently attacked by RKG-3 anti-tank grenades. In response, they introduce slat' and 'bird-cage' armour to deflect and have them detonate prematurely.

*The threat of improvised explosive devices (IEDs) in 21st Century conflicts in Iraq and Afghanistan has led to a focus on detonating projectiles early to protect vehicles from the full force of the blast.*



**RPG-43**
**Date: 1943**
Speciality: **Rocket-propelled, anti-tank grenade**
Location: **Russia**

## 6 THE ITALO-TURKISH WAR

**TAJGURA OASIS, LIBYA**
1 NOVEMBER 1911

The first aerial bombing raid is conducted by Giulio Gavotti during the Italian invasion of what is now Libya. He drops four grenades over an enemy camp from an Etrich Taube monoplane. Nobody is injured.

## 7 THE BATTLE OF KILLIECRANKIE

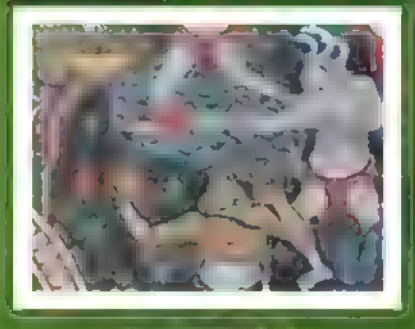
**HIGHLANDS, SCOTLAND**
27 JULY 1689

This is one of the battles of the Glorious Revolution, a war between Jacobites and Williamites, with an early use of the word "grenade", for gunpowder-filled, iron balls used in the battle by both forces.

## 3 THE BATTLE OF YPRES

**YPRES, BELGIUM** JANUARY 1916

Allied soldiers struggle to use the No 1 grenade in trench warfare against the Germans. Those that don't accidentally go off before being thrown are often deflected by simple wooden boards or thrown back.



**Zhen Tian Lei**
**(Sky-shaking thunder)**
Date: **960 CE**
Speciality: **Setting enemy camps on fire**
Location: **China**

*Use of tear gas grenades by police forces around the world has increased fears about the militarisation of law enforcement.*

## 2 THE SIEGE OF PETERSBURG

**PETERSBURG, VIRGINIA, USA**
9 JUNE 1864 – 25 MARCH 1865

Union soldiers in the American Civil War use the Ketchum Grenade, a cast-iron grenade, among other weapons to wear down Petersburg, a Confederate supply stronghold. The grenade is woefully ineffective, contributing to the failure to take the city.

## 8 SAO PAULO DEMONSTRATION

**SAO PAULO, BRAZIL** 8 JUNE 2014

Riot police in Sao Paulo use tear-gas grenades to break up a mostly peaceful mass demonstration led by transit workers, only three days before the first game of the 2014 World Cup in Brazil.

National Army Museum/Corbis

# ANATOMY OF A M67 GRENADE

Crack open an armed explosive to see the intricate mechanism of this highly destructive weapon of war

**SAFETY**
To prevent accidental removal and detonation, the pull ring is diamond shaped with a safety clip at a 40-degree angle. An upgrade known as the M68 has a backup

**COOKING**
The fuse of an M67 is around 4-5 seconds. To avoid it being thrown back, the frag is sometimes held for longer. 'Cooking' is often discouraged though as fuses cannot be 100 per cent reliable in their timing.

Fuse holder

Striker spring

**EXPLOSIVE**
Each grenade

of the explosive Composition B. The is a mix of RDX and TNT and has been the standard filler since World War

and reduce the chance of it being found and thrown back. It also usually has a single yellow band as standard

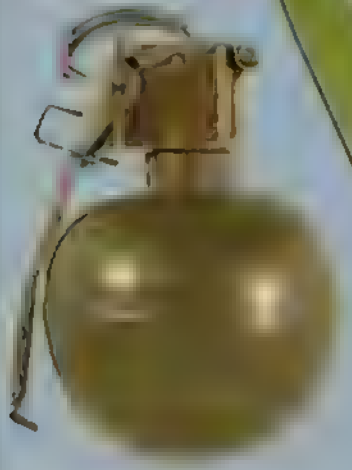
Cast iron shell

Composite B explosive

Detonator / Igniter

Detonation is activated when the ring is pulled, disabling the safety pin and lever. Inside the grenade, the firing pin strikes against the percussion cap after the 4-5 second delay, igniting the M213 fuse. If the safety is still in place, the process can be stopped

When thrown, the fragmentation grenade disintegrates and shards of metal shoot in all directions to accompany the initial blast. When you hear 'frag out', you have to scarper quick, as this shrapnel can reach a distance of 230 metres (755 feet)!



**M67 fragmentation grenade**
*USA, 1971-present*

"When you hear 'frag out', you have to scarper quick, as this shrapnel can reach a distance of 230 metres"

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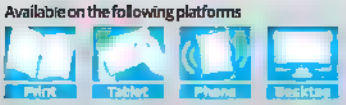


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Frontline

# EVOLUTION OF GRENADES

## Robert Fleming, curator at the Department of Access & Outreach at the National Army Museum, talks about grenades in the 20th Century

Grenades go back as far as the 8th Century, before being developed into cast iron bombshells by the Middle Ages. However, they didn't play a major part in warfare until the 20th Century. Since then, they have become an integral part of the modern battlefield.

### HOW WERE GRENADES USED IN WWI?

In the years immediately prior to the First World War, Marten Hale created a grenade that was highly effective and he convinced the British Army of its usefulness.

The Royal Laboratory invented the No 1 Grenade in 1908. It contained explosive material with an iron fragmentation band and an impact fuse, detonating when the top of the grenade hit the ground. A long cane handle enabled the user to throw the grenade further than the blast of the explosion. Just as they had done in the Crimea, troops often improvised their own weapons in the trenches, such as the Jam Tin Grenade. These were literally Jam Tins or Bully Beef Tins filled with an explosive charge, metal fragments or ball bearings and a lit fuse protruding from the top.

*Known as the 'Thumper', the M79 grenade launcher first appeared in the Vietnam War and is still used all over the world today*

Reliable manufactured versions of the fragmentation grenade became available in 1915 in the form of the Mills bomb. The beauty of the Mills was its classic design: a grooved cast iron "pineapple" which would fragment along its grooves, but fit neatly into the palm of the hand. Although slightly heavier than a cricket ball, it was easy to throw in the same fashion, and most men could throw it 15 to 20 metres (50 to 65 feet). Although the blast radius was actually wider than this, in trench warfare it was ideal, as it could be thrown, and then the thrower could duck back into his trench for protection. Skilled throwers, or 'bombers' as they were known, were even able to accurately land grenades inside enemy trenches when they were close enough. By the middle of the war, Britain was producing over 250,000 grenades and 50 different grade designs every week! Australian Commonwealth Pattern Jackets were fitted with pleated pockets that could fit four Mills bombs each, enabling them to carry eight grenades in offensive attacks!

### WERE THEY EFFECTIVE? SOME REPORTS SUGGEST THEY DID JUST AS MUCH DAMAGE TO THE THROWER AS THEY DID TO THE TARGET.

They were highly effective in trench combat because of the containment of blasts within confined spaces, but they were very much just as dangerous to the thrower – especially in the open. Although the stated immediate killing range of the blast was around five to ten yards, fragmentation could easily travel 30 to 40 yards and cause significant injury, so taking cover after throwing, or throwing into a confined space was very important for the safety of the bomber.

### JUST HOW INFLUENTIAL WAS THE MILLS BOMB AS A GRENADE?

The Mills bomb really was the classic template for many of the world's modern grenades. British and Commonwealth armies used variations of it in both world wars, and it formed the template for the US M2 Grenade – one of the primary grenades used in the 20th Century by many of the world's armies and featuring in World War I, World War II, Korean War, Vietnam War, Suez Crisis, and the Six Day War. It was phased out by US forces after the Korean War and replaced by the M26, which is a similar shape to the Mills and M2, and the British Army introduced the L2 Series variant of the US M26.

### HOW WERE THESE FIRST MODERN GRENADES DEVELOPED UPON IN THE INTERWAR PERIOD?

Really there was actually not much development between the wars; the main changes were that early in the World War II, fuse timers were shortened, as during the Battle of France in 1940, British soldiers reported that German soldiers were picking them up and throwing them back! The main difference really was that grenades were more reliable and produced in much vaster quantities – the US alone produced some 50 million grenades during WWII.

**THE MILLS BOMB REALLY WAS THE CLASSIC TEMPLATE FOR MANY OF THE WORLD'S MODERN GRENADES.**

*The Mills bomb was created by the British in 1915 and was the first reliable mass-produced grenade.*

### WHAT WAS THE ROLE OF A GRENADIER IN THIS PERIOD?

Although their origins, and hence their name, is in being specialist troops that threw grenades, by the First World War the grenadiers were actually normal infantry and fought the same way as other infantry regiments. Specialist grenade throwers were employed, but were called bombers. Bombing parties were formed that even had sub-specialist jobs. The British bombing party usually had nine or ten men, consisting of an officer and NCO or just an NCO, two throwers, two bomb carriers to keep grenades going to the throwers and two bayonet men, to ensure no one got too close to the throwers. They would also have two back-ups in case of injury or in case the throwers grew tired. These parties would be involved in trench raiding or attacking trenches or other hard points such as pill boxes and machine gun nests. Despite the general perception that machine guns caused devastation and were difficult to silence, by 1917, infantry using fire-and-manoeuvre tactics, and bombing parties were able to destroy fortified positions with relatively light casualties.

### WHAT WAS THE FIRST RIFLE TO SUCCESSFULLY ATTACH A GRENADE TO IT?

The first rifle grenade was the Hale's rifle grenade. It was invented by Marten Hale in 1915 and utilised his original No 3 grenade design. To fire the No 3, the user must fit the grenade into the rifle, insert the detonator, lay the rifle on the ground in the correct position, remove the safety pin, pull back the safety pin collar, insert a special blank round into the rifle, then fire. Cup rifle grenades were also developed, in which the grenade sat in a cup mounted on the end of the rifle.

### HOW DID THE DEVELOPMENT OF GRENADES PROGRESS IN THE AFTERMATH OF WORLD WAR II?

Even after WWII, the Mills bomb was still the British Army's grenade of choice, although after WWII grenades that contained segmented coiled wire in smooth metal casings started to be developed – these were smooth on the outside, making them slightly more aerodynamic, but the internal coil performed the same fragmentation effect upon detonation. The Mills bomb remained in use until 1972, when the L2 Series had taken over.

Both Britain and the US also introduced white phosphorus incendiary grenades during WWII. The main post war developments really have been the refinement of specialist grenades such as concussion grenades, stun grenades, sting grenades and smoke grenades. Grenades are still used today in most of the world's wars – they remain relatively cheap to produce and provide an easy, lightweight, portable, area effect weapon for anti-personnel purposes.

### WHEN WERE THE FIRST GRENADE LAUNCHERS DEVELOPED?

Grenade launchers are actually not modern weapons at all! The first ones were 'hand mortars' developed in the 17th Century that used a flintlock style mechanism to combust a charge, propelling early forms of grenades, which would then also explode. Highly dangerous! We then fast forward to WWI, and things like the Leach Trench Catapult and Sauterelle, which were essentially grenade catapults using elastic tension to fling grenades further than they could be thrown by hand, then of course the rifle grenades already discussed. These were highly effective – the first catapults saw grenades suddenly reaching HQs well behind the front line and giving enemy officers a sudden surprise when they had thought they were a safe distance back.

Rifle grenades were not ideal, as they required mounting specialist devices to your rifle, therefore making it unusable to defend yourself if attacked at close range. Specialist portable grenade launchers were developed to overcome this problem – one of the first was the LS M79 grenade launcher, first used in 1961.

### DO GRENADES STILL PLAY AS BIG ROLE IN MODERN WARFARE AS THEY DID IN THE WORLD WARS?

The grenade continues to play an important role in modern warfare. Not only is it still useful for clearing fortified positions, but particularly in urban combat, where there are many places enemy can take cover and launch surprise attacks, they come in very useful for area and room clearance. Any transition or movement between different hard points usually involves clearing the area with a grenade first. Things like flash bangs and stun grenades offer non-lethal alternatives for stunning enemy combatants when, for example, capture is desirable, or if hostages might be risked by a fragmentation device.

### WHAT DOES THE FUTURE HOLD FOR GRENADES IN COMBAT?

It is difficult as a historian to speculate on future trends, but reviewing the odd arms industry blog and news story reveals trends towards smarter, safer grenade systems. Under barrel grenade launchers have become lightweight and commonplace, so hand thrown grenades are probably likely to be less commonly required. Laser rangefinders for improved accuracy, grenades that can be launched armed but not triggered, and then remotely triggered when desired, or grenades that can pass through walls before exploding on the other side are some of the ideas I have heard bandied about.

*The National Army Museum explores the impact of the British Army on the story of Britain, Europe and the World. A major transformation, supported by the Heritage Lottery Fund means the Museum site is currently closed until 2016. In the meantime, check out* ***www.nam.ac.uk****.*

*The Leach Trench Catapult was used frequently on the Western Front in the First World War and could propel a grenade up to 180 metres (590 feet).*

Frontline

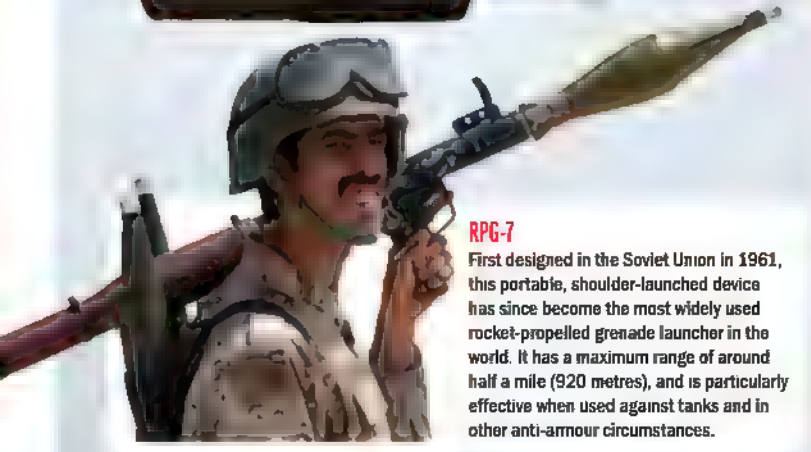
# GRENADE TACTICS

Adaptations to shock, confuse and even take on the heaviest armour

## 1. PICK YOUR GRENADE

### RKG-3 ANTI-TANK GRENADE

As the name suggests, this is also particularly effective against armoured vehicles. When thrown, a miniature four-panel parachute is deployed, meaning that if targeted correctly, it will strike the target at a 90-degree angle. It was originally used in the Soviet Union, but has since been seen in use in Iraq.

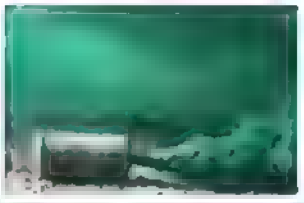


### RPG-7

First designed in the Soviet Union in 1961, this portable, shoulder-launched device has since become the most widely used rocket-propelled grenade launcher in the world. It has a maximum range of around half a mile (920 metres), and is particularly effective when used against tanks and in other anti-armour circumstances.

### AN M18 SMOKE GRENADE

In contrast to the other types of explosives on this page, the AN M18 is intended as a signalling device rather than an offensive weapon. When ignited, smoke billows through four ignition holes on the top of the device, with the smoke being either violet, green, red or yellow depending on the markings on the side.



### BOOBY TRAPS AND IEDS

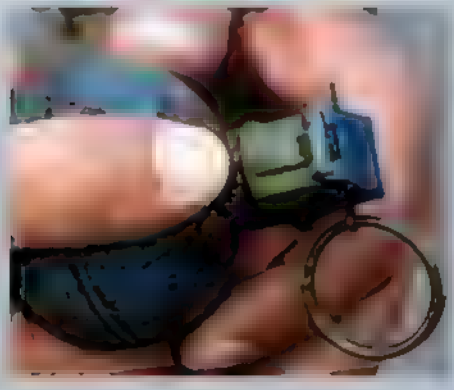
The hand grenade's ease of use makes it particularly well suited for booby traps. Many improvised explosive devices (IEDs) in use in Iraq, Eastern Ukraine and numerous other guerilla conflicts worldwide make use of conventional grenades, as well as landmines and home made explosives, with murderous ingenuity.

### XM102 STUN GRENADE

Classified as a 'less lethal' weapon (as they have been known to be fatal, despite their moniker), when detonated these emit a sound of 170 to 180 decibels, causing instant disorientation. They are used to clear rooms when in the presence of non-combatants, particularly during ambushes.

## 2. PRIME AND COOK

After pulling out the safety pin, the delay detonation cycle of the M67 gives the thrower four to five seconds to throw the grenade at the target. The M67 consists of 6.5 ounces (185 grams) of sensitive 'Composition B' explosives, which is in turn contained within a case with a diameter of 2.5 inches (6.35 centimetres).



## 3. LAUNCH AND IGNITION

After the grenade has been launched, the detonation cycle is activated. This is caused by the spring-loaded safety lever separating from the grenade itself while in mid-flight. In turn, the M213 series fuse ignites the Composition B material, causing the subsequent destructive explosion and fragmentation.

## 4. TAKE COVER

The M67 grenade is designed to inflict damage on enemy positions too obscure to be targeted by gunfire. The explosive range of the grenade is estimated to be lethal to a distance of 16.5 feet (5 metres) and can cause damage up to about 50 feet (15 metres), while fragments can be found as much as 750 feet (228 metres) away.

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# HEROES AND INNOVATORS

## Meet six of the incredible men whose engineering inspiration or battlefield heroism made grenades a part of history

### WILLIAM KYLE CARPENTER

***THREW HIMSELF ON A LIVE GRENADE TO SAVE HIS FELLOW MARINE***

**Years** 1989 to present
**Country** US

On 21 November 2010, Lance Corporal Carpenter was manning a rooftop position at a US patrol base in the notorious Helmand Province, Afghanistan. When insurgents attacked the base in full daylight, Carpenter and fellow marine Nicholas Eufrazio became pinned down by small arms fire and eventually several grenades were hurled into the base. Still unable to accurately locate their enemy, the marines were forced to take cover in their position.

When a grenade fell directly on the marines' position, Carpenter made the split-second decision to place his body between it and Eufrazio to shield his comrade. The ensuing blast was directed mostly downwards through the roof the marines were positioned on, sending debris falling into the compound. Carpenter suffered multiple facial and skull fractures, a collapsed lung, as well as shrapnel wounds all over his body. After over 30 operations and over two and half years in hospital, Carpenter recovered from his injuries. He was awarded the Medal of Honor in June 2014.

*Lance Corporal Carpenter lost his right eye and much of his lower jaw in the grenade blast*

*US Marines in action in Afghanistan in 2014*

## WILLIAM KETCHUM

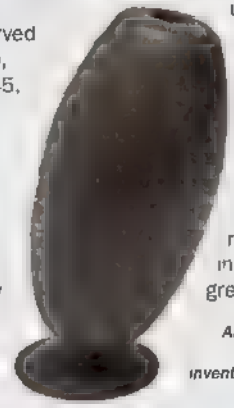
***PATENTED THE USE OF THE KETCHUM GRENADE***

**Years** 1798-1876
**Country** USA

The American Civil War was a hugely destructive time, with both sides constantly on the lookout for any weapon that might give them the slightest advantage. Enter William Ketchum.

Having previously served as the mayor of Buffalo, New York, from 1844-45, he would later become a member of the Union forces during the War, where he patented the use of a weapon that he hoped would tip the balance. Named the Ketchum Grenade, they came in the form of a cast iron ball with a fin. On the end was a cap, on which the grenade would have to land for the explosives within to detonate.

Although they were used at the battles of Petersburg and Vicksburg, the fact that they had to land on the nose in order to explode made them unreliable. Indeed, an account from an attack at Port Hudson records Confederate soldiers catching them in blankets before throwing them back at the enemy. Despite their deficiencies, they represented a milestone in the use of hand grenades in combat.



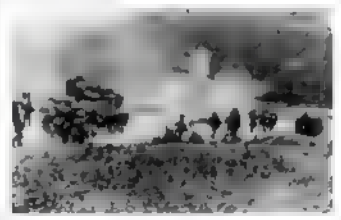
*Although potentially destructive, ultimately William Ketchum's invention proved to be too inefficient to warrant wider manufacture*

## HAVILDAR LACHHIMAN GURUNG

***DEFENDED HIS POSITION AFTER HIS ARM WAS BLOWN OFF BY AN ENEMY GRENADE***

**Years** 1917-2010
**Country** United Kingdom

During the Burma Campaign conducted by British and Commonwealth forces in 1945, Rifleman Lachhiman Gurung's battalion was tasked with attacking Japanese forces across the Irrawaddy River, in the north of the country. On the night of 12 May, he was manning the forward-most position of his platoon when it came under repeated attack from a much superior force. Japanese troops hurled several grenades into Gurung's position in an attempt to knock it out, as it commanded a strategic view of a nearby jungle path. Gurung successfully picked up and simply threw back two of these grenades at the enemy. However, upon gathering a third, it detonated in his hand, shattering his arm and blowing off his fingers. Despite his horrific wounds, the brave Gurkha continued to resist the enemy, operating his rifle at point blank range with his remaining arm. For successfully defending his position in this way and killing 30 enemy combatants, Gurung was awarded the Victoria Cross.



## NILS WALTERSEN AASEN

***CREATOR OF THE FIRST MODERN HAND GRENADE***

**Years** 1878-1925
**Country** Norway

While serving as a sergeant in the Norwegian army in 1903, Nils Watersen Aasen started drawing up designs for what would become the first hand grenade to be widely used in modern times. Although the Norwegian army initially displayed little interest in his new weapon, he continued to market it across Europe, in the process garnering interest from various nations (including the French, who in 1915 anointed him a Knight of the French Legion in recognition of his service).

Ultimately, the Norwegian military relented and recognised the brilliance of his invention, adopting it for wider use and subsequently promoting Aasen to the rank of premier lieutenant. He would go on to open numerous factories across Europe, as well as invent various other types of explosive weapons, including the Aasen mortar (an artillery weapon that was adopted for use by the Russians) and one of the first ever modern landmines.

*Aasen's hand grenade was widely used across Europe during World War I*

## WILLIAM MILLS

***INVENTOR OF THE MILLS BOMB FRAGMENTATION HAND GRENADE***

**Years** 1856-1932
**Country** UK

Before World War I, grenades were for the most part volatile and unreliable, just as likely to explode in the hands of their wielders as they were upon contact with the enemy. Sunderland-born William Mills changed that with the invention of his Mills bomb. Having opened the Mills Munition Factory in Birmingham in 1915, he took to work making sure a hand grenade could be used that was both relatively safe to use and fit for purpose. The end result was a device that utilised a spring-loaded firing pin and lever, coupled with a four second fuse that allowed the thrower sufficient time to deploy the weapon and take cover. The Mills bomb grenade was ultimately a success, with the British forces adopting it as their primary fragmentation grenade weapon and over 75,000,000 were supplied for this purpose. In recognition of his services, Mills was knighted in 1922.

*Mills' invention was the first reliable fragmentation grenade to be adopted for use by the British armed forces*

## JIAO YU & LIU JI

***COMPILED THE FIRST GUIDE TO EXPLOSIVE WEAPONS***

**Years** c. 14th-15th Century
**Country** China

Having risen through the ranks of the Chinese military, Jiao Yu would not only go on to gain aristocratic status – he would, alongside his contemporary Liu Ji, create one of the definitive manuals on explosive warfare in the form of the *Huolongjing*, a text that went on to influence and cement many of the principles behind gunpowder weapons and their tactics.

After studying the teachings of renowned philosopher Confucius and the words of the semi-mythical warlord and tactician Sun Tzu, in addition to the finer points of Daoism, Yu joined the ranks of future Emperor and Ming Dynasty founder Zhu Yuanzhang, who was leading what would later become known as the 'Red Turban Rebellion' against the occupying Mongol forces. Yu would quickly gain favour with Yuanzhang thanks to his skills, leading to his becoming an adviser and later general.

A large factor in Yu's growing influence was his innovative plan for the use of explosive devices, or 'fire weapons', as they were then known. Among the weapons used during the campaign were primitive types of grenades, cannonballs, guns, mines and rocket launchers, among other devices. Thanks to Yu's advice, Yuanzhang's forces ran rampant, driving the Mongols out of Beijing in 1367, with the military leader being declared Emperor in the following year.

Afterwards, Yu remained in a position of power, being put in charge of the Shen Zhi Ying Armory, which contained many different kinds of guns, artillery and explosives. With further repositories being established around the country, the importance of 'fire weapons' was clearly recognised – indeed, the subject was documented in great detail in the *Huolongjing* (Fire Drake Manual), which he co-wrote with poet and tactician Liu Ji (1311 - 1375). Ji, like Yu, had battlefield experience and owed significant victories to the emerging use of firearms.

# HEAD TO HEAD

During World War II opposing American and German troops used different types of grenades. While the Allies favoured the MK II grenade, the German projectile of choice was the Model 24 Stielhandgranate

## MODEL 24 STIELHANDGRANATE

GERMAN WEHRMACHT

### BLAST RADIUS

A Model 24 Stielhandgranate blast would spread to a maximum of 13 metres (42 feet). It mostly relied on its shock value, than endangering its targets.

### MECHANISM

To arm, the handle is unscrewed from the head to reveal the delay fuse, which is then triggered by friction. The grenades had to be prepared out on the field.

### FUSE

The fuse would detonate in four-five seconds. This gave the soldier time to escape the blast radius, but it also gave the enemy time to throw the grenade back.

### DESIGN

The filler is encased within an iron shell. Unlike the Allied fragmentation grenades, Mark 24s relied solely on the blast. The pull-

### TOTAL

### GUN ATTACHMENT

The weapon of choice for the German infantry, the Karabiner 98k rifle came complete with a grenade attachment. Known as a Gewehrgranatengerät, (rifle grenade device), the bolt-action rifle didn't have a scope in normal use but utilised one when made capable of firing a grenade, which was fitted where the bayonet blade would usually be. The Schuss GP 40 grenade was specifically designed for this purpose and came in both standard and amour-piercing varieties for taking on either personnel or vehicles. The rifle could effectively fire a grenade over a distance of 250 metres (820 feet).

**BOOBY TRAP?**

The Model 24 could be used as a booby trap. The delay fuse could be removed for when an unsuspecting enemy soldier tried to use it.

## MK II

### BLAST RADIUS

This had a smaller area of effect than the Stielhandgranate as it was based on fragment damage rather than a solitary blast.

### MECHANISM

A simple system of a ring-pull holding a safety pin would activate an approximately five-second-long fuse when pulled.

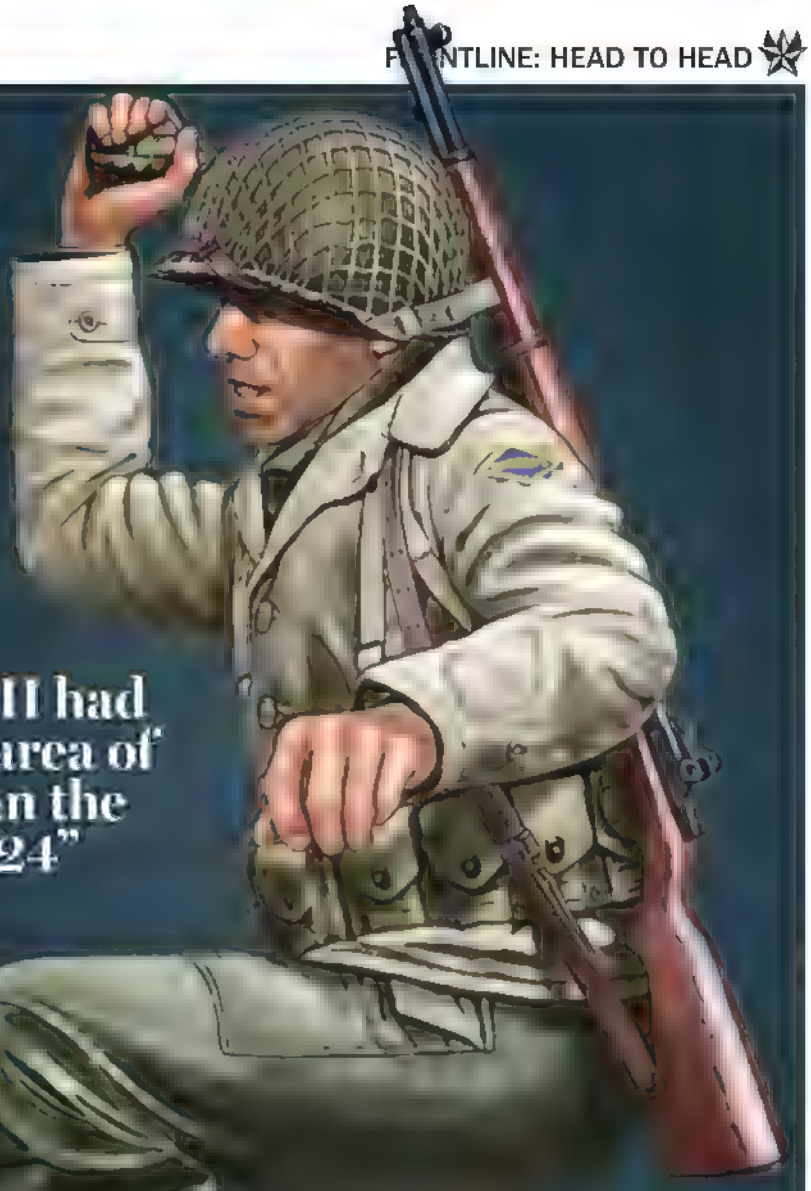
### FUSE

The GI had around five seconds to 'cook' the grenade and lessen the chance of it being thrown back – of course, this carried its own risks.

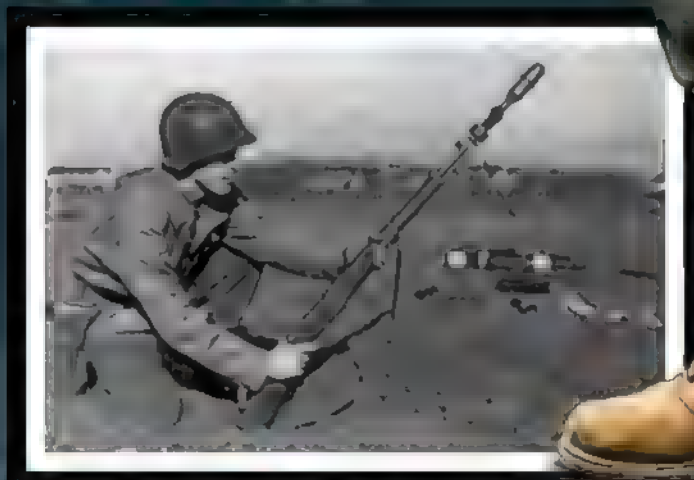
### DESIGN

The weapon is shaped like a pineapple for two reasons. First the grooves make it easier to grip and second it enables the fragmentation to spread out on impact.

### TOTAL



"The MK II had a smaller area of effect than the Model 24"



### GUN ATTACHMENT

Developed in 1943, the M7 Garand grenade attachment was similar to its German equivalent. A downside was that the rifle was unable to fire in a semi-automatic capacity because the gas system that fired the bullets was diverted to launching grenades when the add-on was clipped to the rifle. Even when the grenade was removed, cartridges had to be fired off before it returned to being semi-automatic. This issue was partly rectified by the addition of a valve screw to replace the solid screw in 1944. The maximum firing distance was greater than the German version at 350 metres (1,140 feet).

**DID YOU KNOW?**

The MK II was so effective that it was used in the US military right up until the 1960s, when it was finally replaced by the superior M26 series.

Bundesarchiv, Bild/ The Art Agency/Jean-Michel Girard

# FALKLANDS: THATCHER'S WAR

When British sovereign territory was invaded for the first time in a generation, everyone said it would be impossible to reclaim. What followed was one of the most logistically challenging wars of the 20th Century

WORDS
NICK SOLOMEY

In 1982 Britain's prime minister Marg[illegible] Thatcher and Argentina's dictator Gen[illegible] Leopoldo Galtieri had much in common. Both were fervently anti-Communist, both presided over nations in economic turmoil, and both were ruthless gamblers prepared to go to war in order to cling to power.

On 2 April of that year, after much posturing, Argentina sent a force of 600 Marines to seize control of the tiny British-held islands off its coast. At 4am, two Argentine Navy vessels crept up on the coast of East Falkland, close to the capital Port Stanley, and unleashed an armada of landing craft into the choppy waters of the South Atlantic. Equipped with armoured personnel carriers, heavy machine guns, mortars and 90mm recoilless rifles, the 600-strong invasion force swept ashore unchallenged and rushed towards the capital.

At the time, the 57 Royal Marines garrisoned there were all that stood in the way of Argentina realising a dream that dated back to its birth as independent nation 150 years earlier. To take back Las Malvinas, the islands

many Argentines saw as rightfully theirs, and to finally boot out the region's last remaining colonial bullies (the British) was more than just a matter of national pride. It was the fulfilment of some sort of manifest destiny.

Outnumbered ten to one, Argentinian commanders no doubt imagined the lightly armed Brits would surrender without a fight. In the event, they held out for three hours, inflicting casualties and kills without suffering any themselves. It was a lesson nobody in the Argentinian military seemed to heed. Even in this microcosm, the difference in quality of the two countries' armed forces was evident. It should have been a warning to the Galtieri regime that while picking the fight in the first place wasn't the brightest idea, having picked it, the worst thing it could now do was underestimate the opposition.

Of course, the UK was on the other side of the world. It was a has-been superpower without the resources, let alone the stomach to fight for a place most of its citizens had never even heard of. So went the thinking in Buenos Aires where, as news of the invasion rang out, the locals swept out onto the streets to show their support for the Galtieri-led Junta. A 250,000-strong crowd appeared in the heart of the capital chanting their approval where just days before they'd gathered to howl in protest against rocketing inflation, unemployment and the regime's brutality. In a moment, all of that had been forgotten, so intoxicating was the promise of Las Malvinas. Even trade unionists cheered the fascist Junta that morning.

## Britain's reaction

In London, the mood couldn't have been more different. While not everyone could be sure where the Falkland Islands were (off the coast of Scotland was the joke doing the rounds) the British establishment quickly talked itself into a state of righteous indignation. British sovereign territory had been invaded, the country's honour insulted and the lack of respect shown by an upstart nation like Argentina was indicative of just how far Britain's national standing had fallen. For some it was proof, yet again, that the country was going to the dogs and that strong leadership was needed.

The popularity of the Thatcher government in the spring of 1982 was at an all-time low. Spiralling unemployment and inner-city riots, coupled with her government's apparent lack of compassion, had rendered Mrs Thatcher an electoral liability. The Argentinian invasion couldn't have come at a worse time. There were rowdy scenes in parliament, followed by the hasty resignation of the Foreign Secretary Lord Carrington, who Thatcher shoved onto his sword. Britain had been humiliated, so the question now was what was the country going to do?

Recently declassified documents reveal how, at the time, Thatcher described the invasion as the worst moment of her life. She was left feeling powerless, advised on one side by her

*The task force was sent off to choruses of Rule Britannia by dockside well-wishers and military bands, invoking Britain's glory days of Empire*

**"BRITAIN HAD BEEN HUMILIATED, SO THE QUESTION NOW WAS WHAT WAS THE COUNTRY GOING TO DO?"**

*Despite being outnumbered ten to one, the British Royal Marines stationed on the island held out for three hours against better-armed opposition*

# THE BRITISH TASK FORCE

**DEFEATING THE ARGENTINIANS WAS A MAMMOTH LOGISTICAL FEAT, REQUIRING THE CO-OPERATION OF BRITAIN'S COMBINED ARMED SERVICES. HERE'S HOW THEY CONTRIBUTED**

## ROYAL NAVY

COMMANDER (LONDON): ADMIRAL SIR JOHN FIELDHOUSE
COMMANDER (S. ATLANTIC): REAR ADMIRAL SANDY WOODWARD

**2**
**AIRCRAFT CARRIERS**

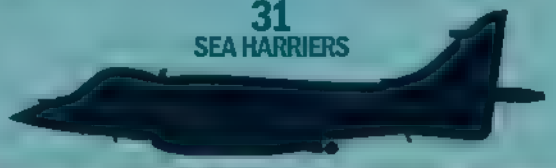
**15**
**FRIGATES**

**6**
**SUBMARINES**

## AIRCRAFT

(FROM FLEET AIR ARM, ROYAL AIR FORCE, ARMY AIR CORPS, AND ROYAL MARINES)
OVERALL COMMANDER: MAJOR GENERAL JEREMY MOORE, ROYAL MARINES

**31**
**SEA HARRIERS**



**48**
**SEA KING HELICOPTERS**

**5**
**VULCAN BOMBERS**

## GROUND FORCES

- 3 Commando Brigade Commander: Brigadier Julian Thompson
- 29 Commando Regiment Royal Artillery
- 40 Commando
- 42 Commando
- 45 Commando
- 2 Battalion, Parachute Regiment
- 3 Battalion, Parachute Regiment
- Commando Logistics Regiment
- Commando Brigade HQ and Signals Squadron
- Reconnaissance Troops, B Squadron The Blues and Royals
- 12 Air Defence Regiment
- Raiding Squadron, Royal Marines
- Mountain and Arctic Warfare Cadre, Royal Marines
- 2,3, 6, Sections SBS
- D and G Squadrons, 22nd SAS Regiment
- 59 Independent Commando Squadron, Royal Engineers
- Commando Forces Band (stretcher bearers)
- 5th Infantry Brigade
  Commander: Brigadier Tony Wilson, MC
- 2 Battalion Scots Guards
- 1 Battalion, Welsh Guards
- 1 Battalion, 7th Duke of Edinburgh's Own Gurkha Rifles
- 97 Battery, Royal Artillery
- HQ 4 Field Regiment, Royal Artillery
- 36 Engineer Regiment, Royal Engineers
- 9 Parachute Squadron, Royal Engineers
- 11 Field Squadron Royal Engineers
- 61 Plant Squadron Royal Engineers
- 1 x Field Troop, 20 Field Squadron Royal Engineers
- 656 Squadron Army Air Corps
- 10 Field Workshop, REME
- 16 Field Ambulance
- 81 Ordnance Company
- Army Catering Corps (†4)
- 407 Troop, Royal Corps of Transport
- 63 Squadron Royal Air Force Regiment
- The Royal Pioneer Corps 518 Company

ministers that a military operation would fail, and cajoled on the other by the US to seek a diplomatic solution.

The US was Britain's biggest ally, but this was the height of the Cold War and America was far more concerned with containing Communism than preserving British overseas interests. Galtieri may have been a brutal dictator, but in Washington's eyes, he was an anti-Communist one and therefore an important pawn in South America. Better him, they reasoned, than another Castro. President Ronald Reagan swiftly dispatched his secretary of state Alexander Haig to London to explain this to the PM.

## Thatcher's great gamble

When Haig arrived on 8 April, he was already too late. In a staggering display of military organisation and political will, Britain's task force had already set sail. In fact, it had been steaming south for three days and as Haig would discover, Thatcher was in no mood to turn it around.

The prime minister had taken a huge political gamble. While most of her political advisers had urged caution, her military ones had been more forthright. Shortly after the invasion she'd met with Admiral Henry Leach, then head of the navy, who'd insisted the Islands could be retaken and must. "If we don't, in another few months we shall be living in a different country," he told her.

These words, more than any other, convinced Thatcher to commit to a war. A war which, if won, could transform Britain's ailing prestige, while simultaneously salvaging her political legacy. If she lost, however, it would not only mean an ocean of body bags and further confirm Britain's decline, but condemn Thatcher personally to the dustbin of history.

The task force took just three days to assemble. More than 100 ships, including two aircraft carriers carrying scores of warplanes and 28,000 men, would be sent to liberate the Falklands. As the flotilla's flagship the aircraft carrier HMS Hermes steamed out of Portsmouth on 5 April, TV news footage showed the public enthusiastically waving troops off with Union flags while military bands played Victorian marching tunes on the dockside. The spirit of jingoism was being deliberately reawakened and as the British nation lined up behind its leader, the TV cameras also sent out another message. On HMS Hermes' deck, not

*By the time Alexander Haig (left) met Margaret Thatcher in April 1982, Britain's task force had already set sail*

### 4 APRIL, 1982

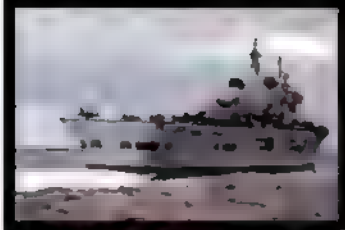
**HMS CONQUEROR DESPATCHED**

Ahead of the task the nuclear sub that would eventually sink the Belgrano sets sail from France. Its mission is to head to the South Atlantic ahead of the task force and secretly monitor the movement of Argentine shipping in the area.

### 5 APRIL, 1982

**FIRST SHIPS LEAVE PORTSMOUTH**

With no contingency plan in place, the task force is rapidly put together from whatever vessels are available. The Royal Navy's two carriers HMS Hermes and HMS Invincible leave first with escort vessels from Portsmouth. They form the nucleus of the fighting ships flotilla.



### 9 APRIL, 1982

**MERCHANT SHIPS PRESS GANGED**

With the Royal Navy stretched, merchant shipping is requisitioned. Upon its return to Southampton from a world cruise, the SS Canberra is refitted as a troop carrier and sets sail with 3 Commando Brigade aboard. The QE2 is similarly press ganged, as are scores of smaller ships.

### 17 APRIL, 1982

**ASCENSION ISLAND REACHED**

By the time the first ships reach Ascension Island, the RAF has set up an airbase there with the plan to launch a long-distance bombing raid on their targets in the Falklands. The 7,000-mile round trip known as the Black Buck raids prove costly from a resource point of view and their impact is minimal.

### 25 APRIL, 1982

**RECAPTURING SOUTH GEORGIA**

Argentinian forces captured the outlying island of South Georgia the day after the Falkland Islands. A mixed force of troops from the Royal Marines, SAS, SBS and Royal Navy makes a direct assault upon Argentinian positions there after a brief naval bombardment. The Argentinians surrender without a fight.

## THE TASK FORCE'S ROUTE

HOW THE BRITISH MILITARY STRETCHED ACROSS THE ATLANTIC

*The HMS Bristol with vital war supplies on board at Ascension Island in 1982*

**1 MAY, 1982**

**THE FIGHTING SHIPS ARRIVE**

Rear Admiral Sandy Woodward arrives with the two carriers, plus various destroyers and frigates. His mission is to establish control of the sea and the air around the Falkland Islands in order to prepare the ground for the invasion force. This is following closely behind, but remaining out of range of Argentina's air force.

**2 MAY 1982**

**BELGRANO SUNK**

The nuclear submarine HMS Conqueror has by now been in the South Atlantic for two weeks. As the Task Force heads south, its commander reports there are six ships heading its way that could possibly damage the carriers. He asks permission to engage and sinks the Belgrano just over 200 miles east of the Falklands.

**4 MAY 1982**

**HMS SHEFFIELD IS SUNK**

In retaliation for the sinking of the Belgrano, the Argentine Air Force attack HMS Sheffield not far from where the Argentinian cruiser was sunk. The destroyer is hit by an exocet missile, which doesn't explode but causes a fire to break out. 20 men are killed in the blaze and the ship so badly damaged she later sinks.

**18 MAY, 1982**

**THE INVASION FORCE ARRIVES**

With the south-Atlantic winter getting worse, and time running out, the invasion is ordered without the establishment of air superiority. After troops are landed at San Carlos bay on East Falkland, enemy aircraft attack their transport ships for four days.

**25 MAY, 1982**

**THE ATLANTIC CONVEYOR IS SUNK**

Just off San Carlos, the cargo ship bringing vital helicopters to the theatre of operations is sunk, transforming the war.

**8 JUNE, 1982**

**BLUFF COVE ATTACK**

Troop ships rammed with 500 men in Bluff Cove are attacked from the air – 50 men are killed, another 150 wounded.

*President Galtieri and his generals may have had the uniforms and the medals, but few if any were military men with substantial combat experience*

stored below as they should have been, were rows of sea harriers and sea king helicopters – it was Thatcher's way of showing the world Britain meant business.

For many onboard, war seemed a remote possibility. It would take three weeks for the ships to complete the 8,000 mile voyage to the bottom of the Earth and when they got there, they fully expected the Argentinians to have fled, scared off by Thatcher's sabre-rattling. But as the nautical miles drifted by, it was clear that Galtieri and Thatcher were in a standoff and neither was going to blink. A UN Security Council demand for Argentina to withdraw its troops was ignored, while Haig's diplomatic mission was doing a great deal of travelling – bouncing between Buenos Aires and London – but getting nowhere.

While Reagan's administration remained outwardly committed to a diplomatic solution, Britain wasn't without allies. Cold warrior, lifelong Anglophile and US Secretary of Defence Caspar Weinberger believed that the US needed to support its key NATO partner or risk undermining the whole alliance in full view of the world – particularly the watchful Soviet Union – and was privately scornful of Haig's efforts. The level of approval Weinberger received from the White House is still disputed, but the Secretary fast tracked a British order for the cutting-edge sidewinder missiles – the latest in air-to-air warfare and Britain's best chance of cutting down Argentinian fighters before they let slip their deadly French-made exocet missiles. Thatcher observed in her memoirs that "America never had a wiser patriot, nor Britain a truer friend." She was a true friend in return and in 1988 Weinberger received a knighthood

## A diplomatic dead end

In London, Haig and his team met with Thatcher's newly formed War Cabinet, comprised of her most trusted political and military advisors, including the chief of the

*Although untested before the conflict, the sea harrier proved to be a decisive weapon in the air. Only the poor weather prevented Britain from gaining total air superiority*

defence staff Admiral Terence Lewin. While she'd take counsel from all her advisors, again it was the military man to whom she paid most attention. Lewin, like Leach, was a WWII vet with a powerful sense of duty, and a firm belief in the ability of Britain to triumph against the odds. "The only thing which will make us lose, is if you lose your nerve," he told the politicians.

The War Cabinet was essentially Thatcher's inner court, never a committee, but it was Lewin who also inadvertently set its agenda. Like all good military leaders, he knew that for a mission to succeed, its objectives must be clear from the outset and insisted they were defined early. By the time Haig arrived, the War Cabinet was entirely focused on the 'liberation of the Falkland Islands and the removal of the occupying army'. The Argentinian army would leave or it would be removed – it was a goal Thatcher refused to be distracted from.

The Argentinian army, meanwhile, had even less intention of leaving than it did of compromising. Documents released in 2012 show just how far the US was prepared to go in appeasing Galtieri, with minutes from a meeting on 30 April revealing the extent of Haig's exasperation with the regime. "Our proposals are a camouflaged transfer of sovereignty," he told colleagues. "The Argentine foreign minister knows this, but the Junta won't accept it."

Had the early military success gone to Galtieri's head? Possibly. Did he think the Junta's newfound popularity would unravel if he suddenly put his guns down? Probably. But there's a third, more unsettling explanation – the Junta didn't know what it was doing. As US diplomat Jean Kirkpatrick later recalled of the Argentine position: "There was a lack of seriousness, as though they didn't have a sense of what war would be like. No sense of the tragedy of it, or the loss of life. They simply had no experience of war."

*Argentine soldiers were keen to conscript, but their relative inexperience was to be their downfall*

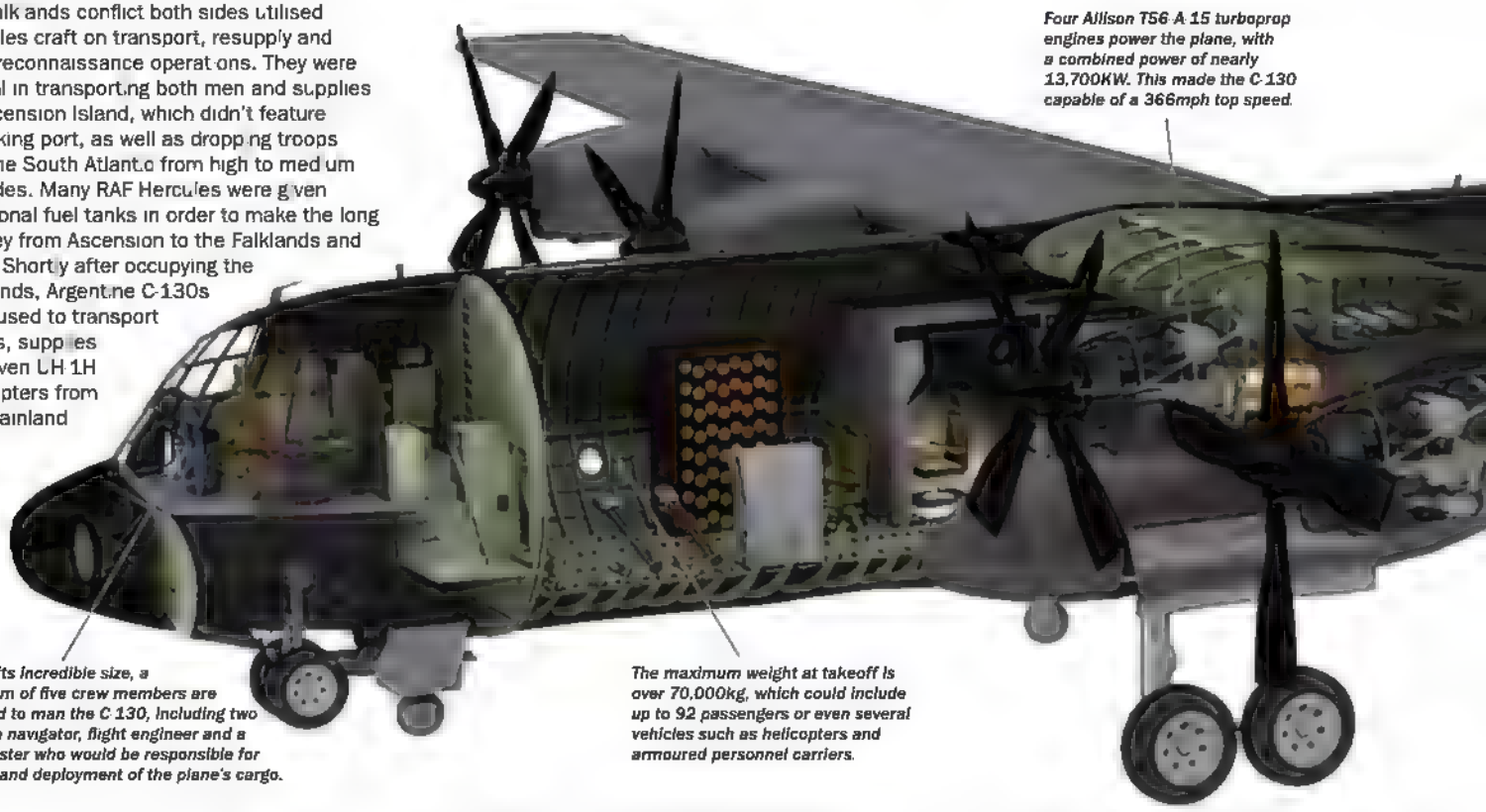
**"AS THE TASK FORCE EDGED CLOSER, THE FALKLANDS BEGAN TO FILL UP WITH YOUNG CONSCRIPTS"**

*The British troops arriving at the Falklands were some of the best Britain had to offer*

# INSIDE A HERCULES C-130

## THE WORKHORSE OF BOTH THE BRITISH AND ARGENTINIAN AIR FORCES

Developed by American company Lockheed, the Hercules C-130 is used the world over as a reliable and multi task aircraft. During the Falklands conflict both sides utilised Hercules craft on transport, resupply and even reconnaissance operations. They were crucial in transporting both men and supplies to Ascension Island, which didn't feature a working port, as well as dropping troops into the South Atlantic from high to medium altitudes. Many RAF Hercules were given additional fuel tanks in order to make the long journey from Ascension to the Falklands and back. Shortly after occupying the Falklands, Argentine C-130s were used to transport troops, supplies and even UH-1H helicopters from the mainland



*Four Allison T56-A-15 turboprop engines power the plane, with a combined power of nearly 13,700KW. This made the C-130 capable of a 366mph top speed.*

*Due to its incredible size, a minimum of five crew members are required to man the C-130, including two pilots, a navigator, flight engineer and a loadmaster who would be responsible for storing and deployment of the plane's cargo.*

*The maximum weight at takeoff is over 70,000kg, which could include up to 92 passengers or even several vehicles such as helicopters and armoured personnel carriers.*

## "TO CONTROL THE SKIES, THE CARRIERS HAD TO BE PROTECTED AT ALL COSTS"

It was true. The Junta's leaders may have worn flash uniforms and rows of meaningless medals, but few had been anywhere near a battlefield. The same was tragically true of the men they sent to do their fighting. As the task force edged closer, the Falklands began to fill up with thousands of young conscripts, many still teenagers. When hostilities started, there may have been 13,000 Argentinian troops on the islands, but they were up against the very best the British war machine had – Royal Marines, the Parachute Regiment, Gurkhas, the Scots and Welsh Guards, plus special forces

### The crisis escalates to a war

By 17 April, as the task force reached Ascension Island, Britain's nearest base to the Falklands 3,500 miles to the east, its naval commander Rear Admiral Sandy Woodward, had split it into two flotillas. The southernmost was an advance party of warships, including the two carriers Hermes and Invincible, while the other consisted of troop carriers and supply ships. The warships, he reasoned, would battle for control of the air and sea around the Falklands and, once achieved, the invasion force would join them.

This was a huge ask. At almost 400 miles from the mainland, the Falklands were well within range of Argentina's 100 or so fighter bombers. To gain air superiority was clearly key, but to achieve this Britain only had as many fighters as it could fit on its two carriers – 31.

When the battle for the Falklands began on 1 May, the first clash inevitably was in the air. Despite being outnumbered, the British had the technological edge. The newly acquired sea harriers turned out to be beasts and armed, as they were, with the latest sidewinder missile system, their pilot aces shot down three Argentinian planes on the first day alone.

But the Brits weren't to have it all their own way. To control the skies, the carriers had to be protected at all costs and after this led to the infamous sinking of the Argentine Cruiser General Belgrano on 2 May, it also caused Britain's first major loss. On 4 May, the destroyer HMS Sheffield, which was effectively being used as a decoy to protect the carriers, was attacked from the air in retaliation for the Belgrano and sunk with the loss of 20 lives

Fighting a campaign so far from home, with no means of immediate resupply meant that the task force had to take everything it needed with them – from men and munitions, to fuel

## THE SINKING OF THE BELGRANO

THE TASK FORCE'S TWO CARRIERS HAD TO BE PROTECTED AT ALL COSTS, LEADING TO THE BIGGEST SINGLE LOSS OF LIFE IN THE WAR...

**30 April**

**EXCLUSION ZONE DECLARED**
00:01 (SAT)
Britain declares 200-mile total exclusion zone (TEZ) around the Falklands, threatening to destroy any craft that enters it.

**ARGENTINE CARRIER LOCATED**
12:00 (SAT)
Argentine warships including the carrier Vincente de Mayo are located 200 miles West of the Islands heading north towards the Task Force.

**BELGRANO DETECTED**
16:00 (SAT)
Nuclear sub HMS Conqueror detects the Belgrano and her escorts outside TEZ and advises Navy HQ.

**1 May**

**TRAP FEARS GROW**
08:00 (SAT)
Conqueror locates a trio of cruisers, including Belgrano and two destroyers, 200 miles east of the Falklands. Fears grow that the task force is sailing into a trap.

**MOVEMENT MONITORED**
09.30 (SAT)
Navy HQ signals the task force that the two groups of Argentinian ships are being monitored.

## HERCULES C-130

**CREW** 5
**LENGTH** 29.8m
**WINGSPAN** 40.4m
**PAYLOAD** 20,000kg
**POWERPLANT** 4x Allison T56-A-15 turboprop
**MAX SPEED** 592km/h
**MAX RANGE** 3,800km
**MAX ALTITUDE** 10,060m

## IN THE PRESS

**THROUGHOUT THE CONFLICT THE BRITISH PRESS REVELLED IN THE POPULIST NEO-JINGOISM THAT THE FALKLANDS WAR INSPIRED**

### THE EMPIRE STRIKES BACK

**NEWSWEEK**

Interestingly, even American publications such as Newsweek caught the nationalist spirit being nurtured in the UK. Only three years before, Britain's economic woes ran so deep that some quarters of the American press described it as the "sick man of Europe".

### GOTCHA!

**THE SUN**

Probably the most infamous headline in British tabloid history was based on the spontaneous response of The Sun's feature editor to the sinking of the Belgrano. A scratch team produced the edition during the middle of a strike and approved the headline.

### DID 1,200 ARGIES DROWN?

**THE SUN**

The original Gotcha! headline was sent to the presses before the full extent of the casualty rate was realised. This was the slightly more-sober headline later editions of The Sun carried after the scale of the event became clearer. Despite its insensitivity, Sun owner Rupert Murdoch still preferred the original.

### THE BRITISH ARE BACK!

**THE DAILY MAIL**

Again the triumphant tone seems out of kilter with modern sensibilities. There can be no mistaking the intention of the headline though. On a literal level, this reports on the establishment of a beachhead at San Carlos, but its statement about national resurgence is palpable.

and food. In doing so, a logistical masterpiece unlike anything ever witnessed before was formed, but it was also the force's greatest weakness. This became even more apparent when the second flotilla reached the Falklands.

By mid-May the south Atlantic winter was kicking in and foul weather hampered the British air campaign. With time running out rapidly, and the prime minister ruling out the option of turning back to the UK, the decision was made to launch the invasion without the necessary air cover. Of course, this was a high-risk strategy. On 18 May, the second wave of ships arrived just off the Falklands. It included the landing force of 3,000 men, a mix of marines and paratroopers who would spearhead the invasion under the command of Brigadier Julian Thompson.

San Carlos Bay on the north-west of East Falkland had been identified as the best place to land. Lightly defended, and importantly out of range of Argentinian artillery, Thompson reasoned that if he could establish a beachhead there and hold it, when the Chinook helicopters eventually turned up he could use them to ferry his troops 50 miles east to the high ground around Stanley where the main Argentine force was

## Invasion!

In the early hours of 21 May, Thompson's troops hit the beaches. Encountering little resistance, they made for the high ground and dug in. Below them, in the bay, the ships that'd brought them were unloading supplies when at 10.30am they were attacked from the air. The attacks continued for four days and by the end of it eight ships had been hit and a two sunk. But the worse was yet to come.

On 25 May, Thompson's helicopters finally arrived in a cargo ship called the Atlantic Conveyor. As she approached San Carlos, two Argentinian jets appeared. She was smashed to pieces and with her every helicopter on board. In a stroke, the ground campaign was transformed and destined to be vastly different from the one envisaged. This most modern of wars, that had seen an entire ocean crossed to bring a self sufficient war machine across the world, would now be fought on foot.

By the time the Argentinians surrendered on 14 June, British casualties numbered over 1,000, with 255 dead. The Argentinians suffered 650 dead and 1,600 wounded. Of the 1,820 Falklanders, just three had lost their lives. Within days, Galtieri was swept from power and Argentina – rather than opting for Communism, as Reagan had feared – was on its way to reestablishing itself as a democracy.

The real winner, though, was Margaret Thatcher. Almost a year to the day after the end of hostilities, she was re-elected prime minister by a landslide off the back of the victory. What many military analysts had declared impossible – to launch a successful seaborne invasion of a target 8,000 miles away in hostile waters with no real prospect of resupply – had been achieved in just 74 days.

### 2 May

**PERMISSION TO ENGAGE**
01:50 (SAT)
Fearing that she may lose the Belgrano and her escorts in shallow waters HMS Conqueror requests permission from War Cabinet to engage.

**PERMISSION GRANTED**
02:00 (SAT)
HMS Conqueror receives orders directly from the Thatcher to sink the Belgrano.

**BELGRANO SUNK**
03.57 (SAT)
Conqueror sends message: BELGRANO SUNK. Of the 1,045 crew members, 323 lose their lives.

Bundesarchiv, Bild 101I-299-1805-16 / Scheck / CC BY-SA

## HMS INVINCIBLE RETURNS HOME

One of two aircraft carriers deployed to the Falklands, HMS Invincible carried Sea King helicopters and BAE Sea Harriers (here pictured) that were crucial in the battle for aerial dominance. Though Argentine forces claimed to have hit Invincible with an exocet missile attack during the conflict, British authorities denied this and no such damage was apparent on the ship's exterior on its return to Portsmouth on 17 September 1982.

# ICON OF WAR
# SEA HARRIER

## DETAILS

**NAME** Sea Harrier
**YEAR** 1978
**ORIGIN** UK
**WINGSPAN** 25 feet (7.6 metres)
**LENGTH** 46.5 feet (14 metres)
**TOP SPEED** 736mph (1184kmph)
**ENGINE** 21,500lb dry thrust Rolls Royce Pegasus Mk 106 vectored-thrust turbofan

Capable of fully vertical takeoff, the Harrier is a lethally versatile weapon in the air and a marvel of British engineering

The Sea Harrier is one of the most recognisable fighter aircraft of the 20th Century, primarily because of its unique ability to take off vertically and even hover in mid-air. Four rotating vectoring nozzles located around the aircraft are connected to the plane's powerful Rolls-Royce engine, giving the pilot the unique option to move the aircraft along its vertical vector path.

The Harrier family of aircraft began development in the 1960s, primarily as a land-based V/STOL (vertical/short takeoff and landing) aircraft. A prototype Sea Harrier, the navy variant of the family, first flew on 20 August 1978 shortly after dozens were commissioned. The craft would enter combat for the first time in the 1982 Falklands War, then again in NATO operations over Bosnia and Kosovo, again and again proving its capabilities as strike and air-to-air combat aircraft. After 28 years of service the Sea Harrier was retired by the Ministry of Defence in 2006, though international variants, with the unique V/STOL technology, are still flying to this day.

UNDER-WING PYLON STATIONS

FUEL DROP TANK

DUAL SIDEWINDER MISSILES

TWIN 30MM ADEN CANNONS

## ACTION IN THE FALKLANDS

When Argentina invaded the Falkland Islands in 1982, 31 Sea Harriers were dispatched along with the British Task Force sent to reclaim the islands. They entered action on 1 May, targeting Argentine positions at Port Stanley and engaging Argentine aircraft in air-to-air combat. Despite being much slower than their opponents, the Sea Harriers suffered no air-to-air casualties and claimed 20 confirmed during the war.

*The BAE Sea Harrier was a vital component of the British Task Force in the Falklands conflict of the 1980s*

## VECTORING NOZZLES

Fixed in four symmetrical locations around the aircraft, these nozzles enable the pilot to alter the direction of the Rolls Royce engines thrust. As well as enabling vertical takeoff and landing, there are even disputed reports pilots also used this capability to perform 'viffing' manoeuvres, vectoring in forward flight to rapidly brake or change direction.

*Sea Harriers weren't flown by the RAF, but the Royal Navy's Fleet Air Arm*

FRONT NOSE WITH RADAR AND FORWARD PITCH CONTROL

MAGNESIUM COATING

WING-TIP WHEEL STRUTS

## ARMAMENTS

Sea Harriers were often fitted with twin 30mm ADEN cannons, attached in a central position under the fuselage. Four pylon stations under the aircraft's wings allowed for additional air-to-air and air-to-surface strike capabilities, including Sidewinder missiles and originally even WE.177 strategic nuclear bombs during the Cold War.

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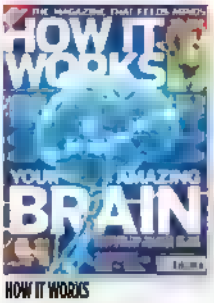


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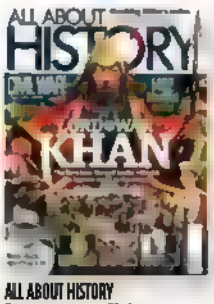


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# Great Battles

# TOWTON

## YORKSHIRE, ENGLAND 29 MARCH, PALM SUNDAY, 1461

**WHO**
Lancaster versus York, as the Duke of Somerset leads the army of King Henry VI to meet Edward, Duke of March, who was King Edward IV

**WHAT**
[illegible] pitting the armies of troops at close to 50,000 men in total on the battlefield. Some 15,000 men lose their lives in the clashes

**WHERE**
The two-day, [illegible] battle in between the villages of Towton and Saxton, around 10 miles south-west of York, the Lancastrian forces base

**WHY**
The young King Edward IV is eager to avenge the death of his father and brother, as well as to put an end to the Lancastrian cause.

**OUTCOME**
[illegible] triumphant King Edward IV [illegible] day, routing the Lancastrian army and inflicting a truly terrible slaughter

Graham Turner/studio58.co.uk

It's 29 March, Palm Sunday, 1461, and the two largest armies ever assembled on English soil meet upon a field that lies a little over ten miles from the city of York. The Wars of the Roses, a fair sounding name for a foul conflict, are still raging and the two armies gather in bristling steel ranks to fight for the competing royal houses and their war-embroiled kings. The red rose of Lancaster is pitted against the white rose of York, King Henry VI versus King Edward IV. The battle-hardened chivalry of England is on the field – men born to the warrior's life and their prowess forged in the crucible of the Hundred Years War. By the day's end they will stain the freshly fallen snow with one another's blood.

Arrayed along the battlefield's northern rim is a Lancastrian force numbering around 25,000, which is sworn to the cause of Henry VI. As the son of the great warrior king Henry V, he has been the ruler on these shores through four war-torn decades. Approaching from the south is a Yorkist troop totalling in the region of 20,000, which is pledged to Henry's rival, the newly acclaimed Edward IV. 'The Rose of Rouen', as he's known, is a warlike young man pressing his claim as the rightful heir of the Plantagenet dynasty, and the lawful king of England.

By nightfall, these two armies will have struggled for somewhere close to ten long hours – most medieval mêlées ended within an hour or two. Very soon, whole sections of the nearby waterway, Cock Beck, will be choked with corpses as one throng finally dissolves under the onslaught of the other and is put to the sword during a furious rout. The age of chivalrous behaviour at war is long dead; the battle ends in a pitiless massacre. Indeed, Towton still stands as the bloodiest encounter ever witnessed in this land. The patch of ground north-east of Castle Hill Wood will later become such a grim killing field that it will be renamed the Bloody Meadow.

## The morning of battle

The day is ill set from the start. Dawn breaks beneath a slate-grey sky making even the veterans among them anxious as men on both sides rise from their billets. Palm Sunday marks the start of Holy Week and more than a few nervous men express their concerns about fighting on such an auspicious day – souls as well as lives are at stake. The pious King Henry VI for one, while still sheltering behind the fortified walls of York, is highly agitated by the day's impending tumult.

Despite the unease, campfires are kindled before men breakfast on hard bread and soft cheese. It's the middle of Lent and many have forsaken meat, though some enjoy dried or pickled fish, and those with a care about their person count themselves fortunate indeed. The air is bitterly cold and a hard northerly wind blows mercilessly – a storm is coming.

Under wind-snapped pennants, the Lancastrian force now takes its battle station along a northerly ridge overlooking a tract still known as North Acres, which nestles between the villages of Saxton to the south and Towton to the north. The Lancastrians' youthful commander-in-chief, the Duke of Somerset, arrays his men in a sound defensive position on the higher ground where his archers can rain down a storm of arrows on the enemy below, forcing them into an offensive position. The attackers must then trudge 100 metres uphill towards them wearing their full armour. Making matters worse, the plate mail favoured by 15th Century English lords, as well as by many of their knights and men-at-arms, could weigh upwards of 110lbs. Such is the efficacy of the English longbow against armoured cavalry that most pitched battles are fought on foot.

Despite the inclement weather, the Lancastrian soldiers are in good cheer, buoyed by their advantageous position. Fighting close to their base in York, many are rested and comparatively well fed, while some are still flushed with their recent success against the Yorkists at the second Battle of St. Albans, fought a little over six weeks before. The Lancastrian host is also the larger and the Yorkists are still awaiting the arrival of the Duke of Norfolk's troops who are travelling northwards. The red rose force also boasts more of the land's nobility, ensuring that it has the most experienced and best-armed fighters in its ranks.

The Yorkists, meanwhile, count only one earl among their number, though it is the redoubtable Warwick. Despite this, their war leaders, are not without military acumen and only yesterday Lord Fauconberg, 'a grizzled little man with the heart of a lion' according to one historian, won a bruising encounter at Ferrybridge where Edward IV's excellent generalship saw him constantly reinforce his vanguard and eventually win the day.

*Many viewed King Henry VI, as a usurper, while others felt he had a rightful claim*

However, Edward's army is fatigued. It suffered the exertions at Ferrybridge at the end of a long and hasty march north from London – a distance of more than 200 miles. For all his weaknesses as a king, the Lancastrian figurehead, Henry VI, has reigned for almost 40 years; Edward, on the other hand, was acclaimed king in London only three weeks previously. This only adds to the unease among some in the Yorkist horde.

Still, the majority of the Yorkists remain firm-hearted. After all, their new king is no usurper. Far from it, Edward is the rightful heir to the Plantagenet crown. It was Henry VI's grandfather, Henry IV, who had set the Wars of the Roses in motion with his usurpation of the English throne from the Plantagenet Richard II back in 1399.

Furthermore, a great many among the Yorkists are stirred by heartfelt passions, believing that they fight for their homes and their families – to the men of southern England, the Lancastrian force is an invading foe. Henry VI's army, put into the field by his war-mongering queen, Margaret of Anjou, is populated by northerners, with a great many Scots among them, sent to war by their queen Mary Gueldres. The Lancastrian march south to the second Battle of St. Albans, and its subsequent journey back north, included cavalcades of rape, robbery and pillage. The Lancastrian leaders gave their troops free rein to plunder at will any towns and villages south of the River Trent. This incensed the common folk of the southern counties.

The York-supporting Earl of Warwick, known to posterity as 'the Kingmaker', was ever the great propagandist and seized upon the

**"THE MAJORITY OF THE YORKISTS REMAIN FIRM-HEARTED. AFTER ALL, THEIR NEW KING IS NO USURPER. FAR FROM IT, EDWARD IS THE RIGHTFUL HEIR TO THE CROWN"**

Once the two sides met, the field soon became littered with the dead and dying, with many simply submitting to fatigue from the prolonged melee

## "THOUSANDS OF SOUTHERN VOLUNTEERS QUICKLY SWELLED THE RANKS OF THE WHITE ROSE AS EDWARD'S TROOPS SET OFF ON THEIR BID TO CRUSH THE NORTHERN MENACE"

Lancastrians' violent misdemeanours, decrying them, not unreasonably, as a blight upon England's fair land. His rabble-rousing whipped the already nervous citizenry of London into a maelstrom of hate and they bar the Lancastrians from their city in the aftermath of St. Albans, even though the city's mayor favoured the red rose over the white

Thousands of southern volunteers quickly swelled the ranks of the white rose as Edward's troops set off on their bid to crush the northern menace and put an end to Henry and Margaret. Now, on this cold March morning, those southern volunteers are moving into position. Many are farmers, artisans and yeomen gentry and they stand alongside those recruited in the Conditions of Array – a law-enforced system of enlistment employed by both sides – as well as alongside the loyal household men-at-arms that serve the peerage.

### The Yorkists approach

As they crest the plateau's southern ridge, the Yorkists sight for the first time the Lancastrians on the northern slope and a cacophonous cheer cracks the morning air. This is a conflict marked not only by political intrigue and

### OPPOSING FORCES

**LANCASTRIANS**
**FIGHTING FOR**
King Henry VI
**INFANTRY & ARCHERS**
25,000
**LEADERS ON THE FIELD**
- Henry Beaufort, Duke of Somerset
- Lord Clifford (killed at Ferrybridge on March 28)
- Henry Percy, Earl of Northumberland

**YORKISTS**
**FIGHTING FOR**
King Edward IV
**INFANTRY & ARCHERS** 20,000
**LEADERS ON THE FIELD**
- Edward, Duke of March (acclaimed King Edward IV)
- Richard Neville, Earl of Warwick
- William Neville, Lord Fauconberg

*An example of 15th-Century armour, worn by those who could afford it*

perennial machinations among the nobles, but also by blood feuds and petty rivalries among all men. More than a few among the thousands of Englishmen on the field are keen to settle scores with one another.

Soon snow begins to fall and then a torrent of sleet. The wind changes direction and drives northwards into the faces of the Lancastrians, obscuring their vision and movement. Seizing the moment, Lord Fauconberg orders the Yorkist archers forward and a body of troops that might comprise as many as 10,000 men shuffles northwards. Longbow men are the core component of every English army, having won great victories in the Hundred Years War – at Crécy, Poitiers, Agincourt and Verneuil. The current law of the land demands that all men not only own a longbow but also practise with it on the village butts.

In the Wars of the Roses, however, both sides count excellent archers among their number, which neuters their potency. This means that pitched battles in England during the 15th Century are invariably slugging matches between hordes of heavily armoured men – brutal, bone-crushing struggles fought with poleaxe and glaive, war hammer and mace. Fauconberg, though, is a wily old campaigner and realises that the change in the wind's direction gives his men the advantage. With the wind at their backs, their arrows will carry further into the enemy host, while the driving wind and sleet will hinder the Lancastrian archers' aim and distance when they eventually loose their arrows in reply.

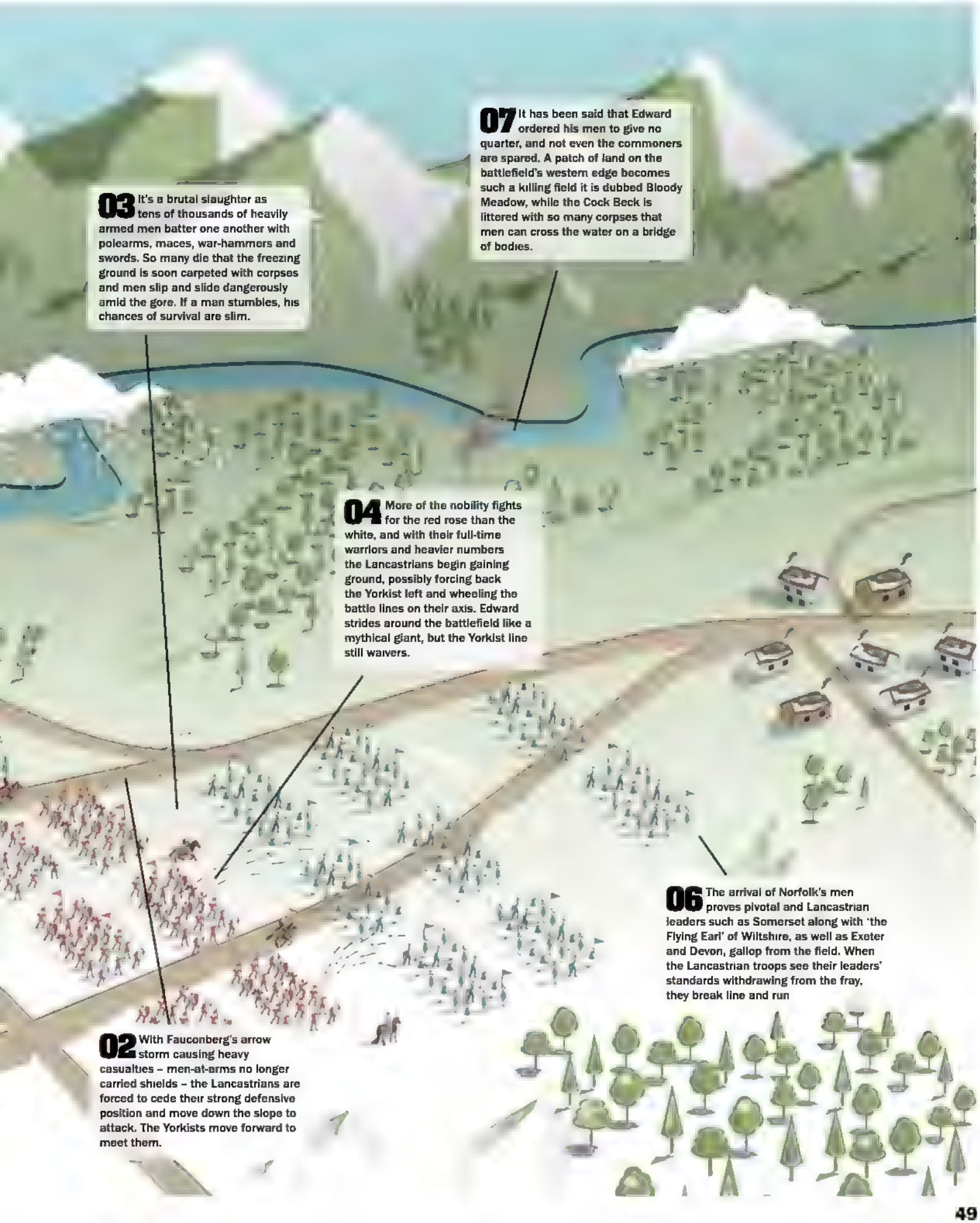
It's an ingenious plan and his archers unleash a murderous volley that darkens further the gloomy, sleet-bedighted skies. The Lancastrians return fire, but their arrows catch in the wind and fall short. The Yorkists continue their fusillade, standing out of range of the Lancastrian arrows and causing ever greater consternation among the enemy ranks; their continuous volleys begin to take a toll. The Lancastrians maintain their own barrage but it has little effect. In fact, once the Yorkist bowmen finish their own sheaves, many move forward to pluck the Lancastrian arrows from the ground in front and send them whistling back from whence they came.

This continued assault maddens the Lancastrian host. Shields are no longer carried in combat and even the heavily armoured lords and knights suffer beneath Fauconberg's relentless barrage. The Lancastrian warlord, Somerset, realising that his casualties are growing, knows that he must move his men forward though the arrow storm and engage the Yorkists. He holds the numerical advantage, and even if he surrenders the higher ground his chances are still good. If he wins the day, the Yorkist cause is surely doomed. Resolutely, he orders the advance.

## The height of battle

Fauconberg, having achieved his ambition and forced Somerset from his strategically advantageous position, now orders his archers to dissolve through the main body of armoured troops behind, purposefully leaving behind thousands of arrows stuck upright in the ground, which the wily old lord knows will hinder the Lancastrian advance. It is time

TOWTON
01 As the wind changes, the falling sleet is blown into the faces of the Lancastrians, prompting Fauconberg to order the Yorkist archers forward. With a strong wind behind them their shafts carry deep into the Lancastrian line. The Lancastrian longbows reply but their arrows catch in the wind and fall short.
05 The Duke of Norfolk's division is still travelling when the battle begins and arrives at a key moment. He enters the battlefield on the south-eastern rim and drives into the melee, thundering into the Lancastrian left with fresh infantry and possibly cavalry too.



**07** It has been said that Edward ordered his men to give no quarter, and not even the commoners are spared. A patch of land on the battlefield's western edge becomes such a killing field it is dubbed Bloody Meadow, while the Cock Beck is littered with so many corpses that men can cross the water on a bridge of bodies.

**03** It's a brutal slaughter as tens of thousands of heavily armed men batter one another with polearms, maces, war-hammers and swords. So many die that the freezing ground is soon carpeted with corpses and men slip and slide dangerously amid the gore. If a man stumbles, his chances of survival are slim.

**04** More of the nobility fights for the red rose than the white, and with their full-time warriors and heavier numbers the Lancastrians begin gaining ground, possibly forcing back the Yorkist left and wheeling the battle lines on their axis. Edward strides around the battlefield like a mythical giant, but the Yorkist line still waivers.

**06** The arrival of Norfolk's men proves pivotal and Lancastrian leaders such as Somerset along with 'the Flying Earl' of Wiltshire, as well as Exeter and Devon, gallop from the field. When the Lancastrian troops see their leaders' standards withdrawing from the fray, they break line and run

**02** With Fauconberg's arrow storm causing heavy casualties – men-at-arms no longer carried shields – the Lancastrians are forced to cede their strong defensive position and move down the slope to attack. The Yorkists move forward to meet them.

*Edward IV's took personal control of the battle by fighting right at the front with his men, spurring them on to victory*

for the plate-clad men at arms to decide the day and the veteran Earl of Warwick along with the young King Edward – a lad of just 19 years, but a giant in size, stature and military accomplishment – rally their men before the final reckoning.

The field is now awash with steel. The Lancastrian army comes thundering down the slope, crashing in waves upon the waiting Yorkist host. The slugging match begins and thousands of men hack at one another with battle-axe and bill. The Earl of Warwick, holding the Yorkist centre and right flank, absorbs a violent assault from the Lancastrian left, commanded by the Earl of Northumberland. The Lancastrians' greater numbers start to tell and the Yorkists lose ground. If the Lancastrians can push them back over the southern slope their line will break and a rout will ensue Warwick appeals for help and messengers are quickly sent to King Edward, who responds by rushing in with his army's reserve and fighting like a man possessed

## "THE LANCASTRIAN ARMY COMES THUNDERING DOWN THE SLOPE, CRASHING IN WAVES UPON THE WAITING YORKIST HOST"

During the 15th Century, it was common for lords and nobles fight amid the press, rallying their troops beneath their fluttering insignia and now as Edward enters the killing zone like a fabled hero of old, he lays about his enemy with his long reach, breaking bones and crushing skulls, moving constantly to bolster his trembling battle-line.

The field is now heaped high with the dead and dying, and men are slipping on the gore underfoot. For all Edward's prowess, his line still wavers. The superior Lancastrian soldiery are making their presence felt and Edward's reserve is thinning out. The Yorkist's left wing is pushed back and the battle line starts to turn on its axis. With a little more effort, the Lancastrians will take the day – Edward's future hangs in the balance

Then, emerging from the snowstorm comes the Yorkist army's errant division – the Duke of Norfolk's troops have arrived at last. Moving up the battlefield's eastern edge they attack with fresh vigour, some mounted and some on foot, cascading down upon the Lancastrian left. The move is decisive and Somerset and a number of leading Lancastrian lords, realising that the day is now against them, mount their steeds and gallop away. Once the Lancastrian force sees its commanders' pennants streaming from the field, the remainder turn on their heels and run. The Lancastrian line is broken and a bloody slaughter ensues

Men throw down weapons and strip off armour as they run for safety, but few make it. Many head westwards and meet the Cock Beck on the Lancastrian right. The ground is

Skeletons [illegible] in Towton

soon slaked with the blood of countless men, earning it the title: Bloody Meadow. The Yorkist 'prickers' are on the field – mounted men who ride down the fleeing infantry. Wielding war hammer and mace, they leave the ground carpeted with corpses. No quarter is given; nobleman or commoner, all are fair game.

The many Lancastrians bolting northwards become victims of their own commanders' strategic design; the bridge across the Cock at the battlefield's northern rim was destroyed the day before, leaving the escaping soldiers nowhere to ford the river. With the victorious, adrenaline-fuelled Yorkists bearing down on them, many take to the waters, though their armour, whether tempered steel or heavily padded jacks, drags them under. Hundreds die, falling victim to either the freezing waters or the Yorkist archers shooting at the floundering men as if they were fish in a barrel. It's not long before the waters are thick with dead, and both pursuers and pursued can now cross the river on a bridge of bodies.

## England paid the price

The slaughter unleashed at Towton stands unparalleled in English history. The day claimed the lives of the Earl of Northumberland along with Lords Dacre, Mauley, Welles and Willoughby along with Sir Anthony Trollope, who all died courtesy of wounds received on the battlefield, while Edward is said to have executed 42 Lancastrian knights after the battle's denouement. Recent archaeological explorations have unearthed some gruesome finds, including a grave pit where evidence suggests that a good many unarmed men were viciously hacked down as they sought clemency from their attackers

Many contemporary chronicles number the Towton dead at more than 30,000 and while modern scholars view this as an exaggeration, most agree that somewhere in the region of 15,000 men perished on that snowbound field near York. Just a few days after the battle, Lord Chancellor George Neville wrote to the papal legate, Francesco Coppini, claiming that so many fell 'dead bodies were seen to cover an area six miles long by three broad'.

Though England paid a heavy price that day, Edward VI had claimed his kingdom. Though not as decisive or famous as the Battle of Bosworth, Towton remains a horrific and sombre name worthy of remembrance in English history

**"MOVING UP THE BATTLEFIELD'S EASTERN EDGE THEY ATTACK WITH FRESH VIGOUR, SOME MOUNTED AND SOME ON FOOT, CASCADING DOWN UPON THE LANCASTRIAN LEFT"**

*Corbis; Alamy; Ed Crooks; Osprey Publishing*

# THE BOXER REBELLION

WORDS TOM FORD

**In 1900 a pro-nationalist uprising laid siege to Beijing, seeking to expel all foreigners. This national crisis would define China's future, but had its roots decades before...**

"Support the Qing, exterminate the foreigners." It's a mantra that would come to characterise the Society of Righteous and Harmonious Fists – the secret Chinese organisation Westerners came to know as Boxers. Over a hundred years later, the group's philosophy and practices seem primitive. They performed possession rituals, complete with chanting and swordplay, which they believed rendered them impervious to Western weaponry and made them capable of flight. But in 1900, their numbers were enough to lay siege to Beijing in the pivotal moment of the Boxer Rebellion, an uprising against the increasingly controlling foreign powers in China. Like many other rebel groups throughout history, the Boxers grew out of significant social and economic unrest, at a time and place where conflict was inevitable.

Tensions between Chinese natives and foreign influence had been growing for decades and there were several outbreaks of war. 60 years earlier, China had fought Britain in the First Opium War (1839-42), a conflict that derived from disputes over Chinese-European trade, most notably China's abolishment of British opium imports and seizure of over 1,200 tons of opium without compensation.

Despite the greater numbers of Chinese, the British army easily defeated them and consequently the power of the Qing dynasty, which had ruled China for almost 200 years by this point, was weakened. The Treaty of Nanking strengthened British power and began what historians would later call the 'Century Of Humiliation' that endured within China. During this time the imperialist powers of Japan and the Western world wielded major influence over the country.

In the mid-1850s, Britain demanded the renegotiation of the treaty to further strengthen its trading power. When the Qing authorities – which had attempted to shirk the original terms of the treaty wherever possible – rejected Britain's new demands, the Second Opium War (1856-60) erupted, this time with the French fighting alongside the British, with support from Russia and the US.

After more humiliating defeats, the Emperor Xianfeng fled from the war in 1860 and left his brother Yixin, the Prince Of Gong, to effectively end the conflict by negotiating the Treaty Of Tianjin. This wasn't completed before Anglo-French troops looted and burned the sacred Summer Palaces in Beijing's Forbidden City.

With the signing of the treaty, more ports were opened to Western trade, permanent diplomatic presence of foreigners was granted, and they were allowed unprecedented right of way in the country. Also, Christians were given full civil rights, including the right to own property and evangelise, which naturally led to the building of many Christian churches. This invasive religious influence would become a major factor in the Boxers' revolt 40 years later.

Another conflict that weakened China's positioning against foreign powers was the First Sino-Japanese War (1894-95), in which China fought Japan over control of Korea. Once again, the Chinese military was outmatched, since it was in desperate need of modernisation. Since the beginning of the First Opium War, it had suffered millions of casualties. Now, for the first time ever, Japan became East Asia's biggest power – a fact that dealt another blow to the reputation and legitimacy of the Qing dynasty, and enabled Japan to join Western powers in their efforts to dominate, divide and ultimately profit from the control of China.

By now, European powers held so much economic and social control that opposition to foreign imperialism was becoming rife. The Westerners drove foreign and domestic policy; the commonly held belief was that the foreign powers had not only humiliated China with defeats in previous wars, but the control they had gained in the aftermath was largely responsible for China's defeat to Japan. Due to "unequal treaties" that had been imposed

*Executioners from the 1900 massacre pose for a picture with their victims*

## KEY FIGURES

### LORD PALMERSTON (1784-1865)

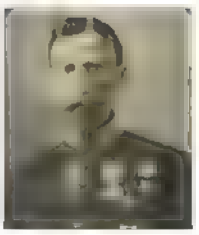
Popular statesman and twice prime minister of the United Kingdom, Palmerston was appalled at China's refusal to free trade and demanded reform. His efforts effectively began the First Opium War, which, once won, opened the doors for foreign nations to take a stronghold in China.

### EMPEROR XIANFENG (1831-61)

As the seventh Qing emperor and ruler of China during the Second Opium War, he maintained the Chinese were superior and would not bow to colonial demands. His health deteriorated after the burning of the Summer Palaces and he finally died a year after China's defeat.

### EMPRESS DOWAGER CIXI (1835-1908)

The concubine to Emperor Xianfeng was a hugely influential figure during his reign and after his death, at which point she unofficially controlled the Qing dynasty. Her support of the Boxer Rebellion is viewed as a major factor in the collapse of the dynasty three years after her death.



### CLAUDE MAXWELL MACDONALD (1852-1915)

Appointed British minister to the Qing dynasty and Empire of Korea in 1896, he was instrumental in Britain leasing Hong Kong from China. He led the legation forces against the Boxers during the siege of Beijing and went on to become Britain's first ambassador to Japan.

### "PRINCE DUAN" ZAIYI (1856-1922)

A pro-nationalist statesman to the Qing dynasty, he arranged meetings between the Boxers and Empress Dowagger Cixi. Becoming head of the Foreign Office, he led the Boxers that besieged Beijing's Church Of The Saviour. He was exiled after the rebellion was crushed, only returning after the fall of the Qing Dynasty.

### CLEMENS FREIHERR VON KETTELER (1853-1900)

A career German diplomat, he married a rich ancestor to the Bush family in the US. When Beijing was invaded in retaliation for the murdered Boxer, von Ketteler ordered his soldiers hunt them down, but after increasing violence attempted to head for the Ministry of Foreign Affairs. His party was fired upon and he was killed.

*Boxers standing proudly together during the war*

on China, foreigners had special privileges and legal immunities. Nationalist sentiments spread, spawning the Boxer movement.

The Boxers were primarily peasants from Shandong, a coastal province in north-eastern China that had been affected by several natural disasters in the late 1890s – first famine, then flooding. As with other regions, Shandong had handed over territorial and commercial control to European nations, in particular Germany, which dominated railways, factories and mines in the province. While the natives grew poorer, the German powers prospered, so the peasants banded together and revolt was only a matter of time.

The Society of Righteous and Harmonious Fists, or Yihequan, was thought to be an offshoot of another secret organisation, the Eight Trigrams Society, which had attempted rebellions against the Qing Dynasty in the late 18th and early 19th Centuries. It's not difficult to see the connection: though their allegiances would change, initially the Yihequan set to destroy the Qing as well as the foreigners

Westerners dubbed them Boxers based on the martial arts and calisthenics they practiced. Their possession rituals were exciting and

## "EUROPEAN POWERS HELD SO MUCH ECONOMIC AND SOCIAL CONTROL THAT OPPOSITION TO FOREIGN IMPERIALISM WAS RIFE ACROSS THE COUNTRY"

alluring to the young peasant village men and their numbers steadily grew. Though women were not permitted to join, some formed their own groups, such as the Red Lanterns, who were reputed to also possess supernatural powers and later helped wounded Boxers at the Battle of Tietsin.

At first, the outbreak of violence was driven by unrest over Western Christian missionaries. In 1897, a mystery band of armed men attacked one such Germany settlement in Juye County, Shandong, and killed two priests In 1898, Boxers attacked a Liyuatun village, where Christians had transformed a temple into a church. That same year, anti-foreign conservatives gained control in the Chinese government and persuaded the Boxers to side with the Qing Dynasty and focus their aggression solely on the foreigners they considered a threat to traditional Chinese culture

The governor of Shandong began enrolling bands of Boxers as militia, giving them a semi official stature. By late 1899 they were violently attacking Chinese Christians and Western missionaries with little or no discretion. In January the following year, Empress Dowager Cixi, who had taken control of the Qing Dynasty, declared public support for the Boxers. The foreigners, who had been able to manipulate the Empress's predecessor more easily, protested. She had not only announced her support for the Boxer movement, but also made an official declaration of war against the foreign powers.

By spring of 1900, the Boxers had gradually spread from Shandong to the Beijing countryside. Now they attacked and killed Christians and burned churches. At the request of foreign diplomats, over 400 troops from eight different countries arrived to defend the Western embassies. On 5 June, the Boxers responded by

### 1839 — THE FIRST OPIUM WAR BEGINS

China's self-imposed isolation and refusal to meet British trade demands ends in the outbreak of war. Some claim the war is as much about Britain's reputation and honour as anything else.

### 1842 — THE WAR ENDS

British ships defeat the Chinese on the Yangtze, at the mouth of one of China's major trade routes. The British then occupy Shanghai and the war officially ends in August.

### 1842 — THE TREATY OF NANKING

Later in August the treaty is signed. It's negotiated as British ships are poised and ready to attack the city of Nanjing. This marks the start of Britain's economic supremacy over China.

### 1856 — THE SECOND OPIUM WAR BEGINS

Attempting to renegotiate the Treaty of Nanking, the British want to open up all of China to foreign trade. Conflict erupts following a dispute over a former British ship seized by China from pirates.

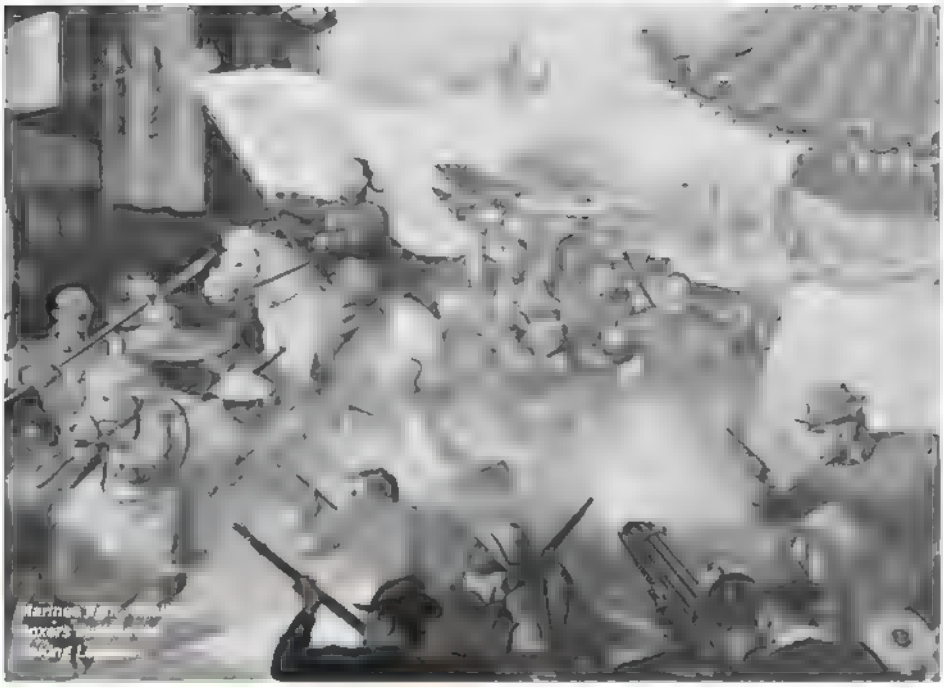
### 1858 — TREATIES OF TIENTSIN & AIGUN

Treaties signed with Britain, France, the US and Russia attempt to end the Second Opium War, but conflict breaks out again when the Xianfeng emperor is swayed from his position.

disabling the railroad through the countryside to isolate Beijing.

There were other problems in Beijing, however. Chinese Muslim soldiers, acting independently to the Boxers, had taken to guarding the southern part of Beijing's walled city and on 11 June, 1900, they murdered a Japanese diplomat. On the same day, came the incident that would set the rebellion in motion – after the first Boxer was seen in Beijing's Legation Quarter, sparking panic amongst the foreign missionaries and diplomats, the German Minister Clemens von Ketteler and his soldiers captured and executed a Boxer boy. After six decades of foreign powers overpowering and governing them, this was a relatively small incident, but one that was ultimately met with an inevitable and violent uprising

To avenge the boy, thousands of Boxers charged the city, burning churches with Christians still inside. A further 2,000 European troops, under command of British Vice Admiral Edward Seymour, were sent to Tianjin to quell the rebellion. At first the Chinese government agreed to this, but became angered by Seymour's movements towards Beijing. Consequently,



*Japanese troops during the Boxer Rebellion*

Manchu Prince Duan became head of the foreign office and order the Boxers and Imperial army to attack foreigners. On 18 June, Empress Dowager Cixi ordered all foreigners to be killed. Two days later, the German envoy Clemens Freiherr von Ketteler was murdered on the streets of Beijing, forcing all other foreigners to quickly fortify the legations. This saw the true beginning of the Boxers' siege of Beijing.

The brutal siege lasted almost two months, until a multinational force – comprising of Western and Japanese soldiers – stormed Beijing on 14 August, destroying the rebellion. However, by this time, hundreds of foreigners and thousands of Chinese Christians had already been killed. Those who survived lived in appalling conditions as they attempted to hold back the Boxers. With the announcement of the Boxer Protocol on September 1901, those responsible were punished and China was forced to pay other nations over $330 million. The Qing was weakened to the point of its collapse.

One of the great myths of the Boxer Rebellion is that is was a regional uprising, one led by renegades acting outside the parameters of official policy. On the contrary, the most powerful figures in office supported the uprising, much as the Boxers had called to "Support the Qing, exterminate the foreigners" – the consequence of decades of national degradation at the hands of foreign powers.

## "AT FIRST, THE OUTBREAK OF VIOLENCE WAS DRIVEN BY UNREST OVER WESTERN CHRISTIAN MISSIONARIES"

### 1860 – THE SUMMER PALACES BURN

Motivated by the brutal torture of numerous British envoys, diplomat Lord Elgin orders the destruction of the Summer Palaces. It's seen as a decisive act in ending the war.

### 1897-98 – SHANDONG DROUGHT & FLOODS

With foreign powers and Christian missionaries taking an economic stronghold in the province, locals are further devastated by crippling natural disasters. Young men begin turning to the secret Boxer movement.

### 1898 – BOXER ATTACKS BEGIN

Violence is directed mainly at Christians and places where traditional Chinese culture is being eradicated by foreign influence. Boxers also clash with Qing troops before changing allegiance.

### 1900 – EMPRESS DOWAGER LENDS SUPPORT

In January, Cixi changes her policy to show support for the Boxer movement, giving legitimacy to their cause. Foreign powers oppose the movement as tensions rise between nations.

### 1900 – THE REBELLION BEGINS

In June, a Boxer boy is executed, leading to the outbreak of violence in Beijing. Within days, the walled city is besieged, resulting in the deaths of thousands.

# THE ROMAN WAR MACHINE

## Discover how the organisation, weapons and training techniques of Rome's legions conquered the world

The Roman Empire dominated global battlefields for centuries, invading huge swathes of Europe and making significant inroads into both Africa and Asia Minor. Pax Romana, Roman peace, lasted from approximately 27 BCE to 180 CE, when the majority of Europe was under long-term Roman administration. During this time the barbarian hordes were quelled and the Empire enjoyed relative tranquillity – Roman citizens had their formidable army to thank for this. Expertly trained and impeccably organised, Roman soldiers were among the best armed soldiers the world had ever seen. The Roman war machine outwitted its barbarian opponents by using expert battle tactics and perfectly engineered weapons and armour.

Whether they were fighting on the sands of Egypt at the height of summer, or the cold icy wastes of northern Europe in winter, the legions had the tools and dedication for the job. The hierarchy and structure of the army was rigidly ordered, from the legate generals at the top, all the way down to the munifex legionaries at the bottom.

The Romans also pioneered the first siege weapons and, unlike other civilisations of the age, soldiers were given full-time pay. In fact, a soldier was one of the finest careers in the Empire. A legionary was paid 225 denarii for one year's service and even earned a pension and sometimes a portion of land after they retired, which was usually after 25 years.

On the battlefield soldiers worked together as one fighting entity, calling upon several deadly combat techniques to unleash on the enemy with devastating effect. However, perhaps the most remarkable aspect of the army was its transport and communication systems. Managing the logistics and administration of such a huge army in ancient times was a tricky business, so it was a phenomenal achievement that Roman generals kept their military machine so well oiled for such a long time.

"WHETHER THEY WERE FIGHTING ON THE SANDS OF EGYPT AT THE HEIGHT OF SUMMER, OR THE COLD ICY WASTES OF NORTHERN EUROPE IN WINTER, THE LEGIONS HAD THE TOOLS AND DEDICATION FOR THE JOB"

Collingwood Historic Art

# TRAINING

## How the Roman army was put through its paces as it prepared for battle

To be selected, a recruit legionary would have to be at least 1.8 metres (5ft 10 inches) tall, be physically fit and have good eyesight. He would usually be allowed to begin his military training at the age of 18, although this could be decreased when the Empire was at war. After swearing an oath of allegiance called a 'sacrementum' to the emperor, he would begin his training. A huge emphasis was placed on marching and legions would travel 20 Roman miles (18.4 miles/29.6 km) a day, with a full load of equipment on their backs. There would also be repeated practise of formations and strategies to use in battles. Weapons training was a daily exercise as was the construction of ramparts and fortifications in case of a surprise barbarian ambush on a Roman camp.

**TRAINING ARENAS**
In harsh winters, training would be moved indoors to purpose-built arenas within the camps, so drills could be carried out 365 days of the year whatever the weather.

**COMBAT TRAINING**
Wooden swords and shields were used in training drills. Here the legionaries would practise their combat technique and hone their skills, ready to do battle with the barbarian hordes.

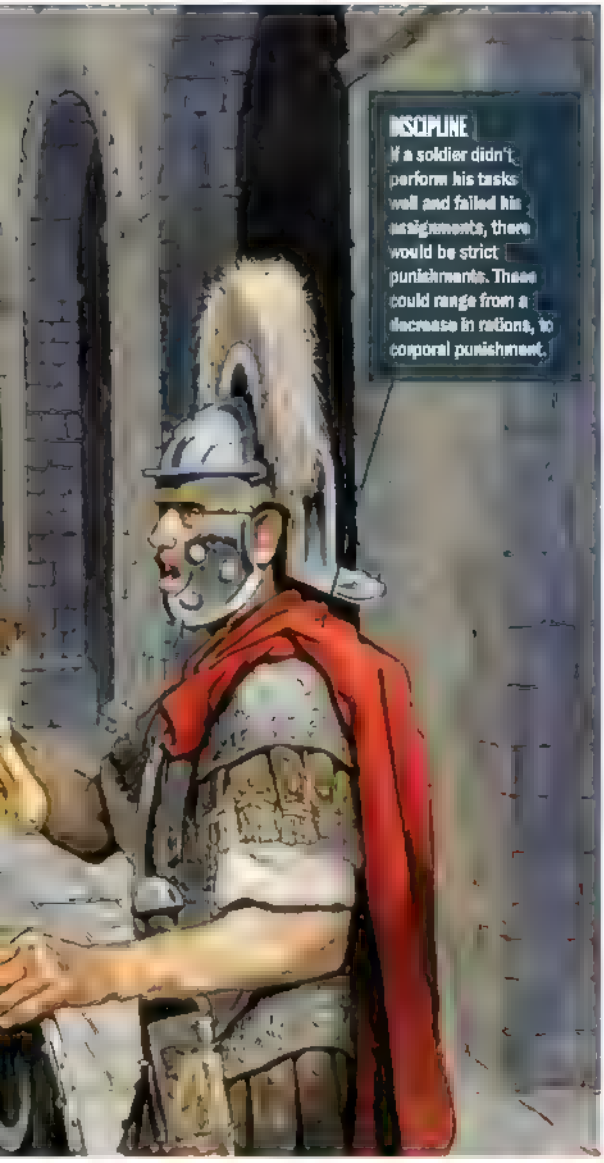
# COMBAT TECHNIQUE

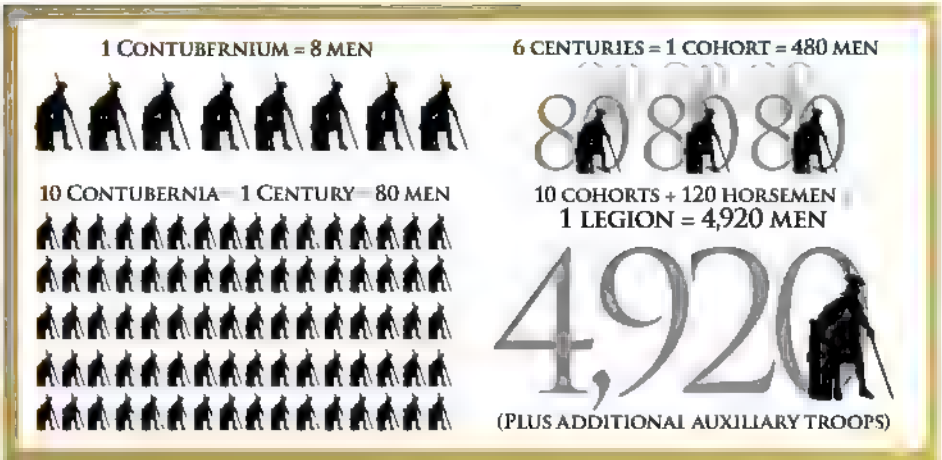
## The hand-to-hand expertise of a Roman legionary

Legionary fighting styles involved a mixture of sword and shield tactics. Barbarians from tribes such as the Visigoths, Ostrogoths, Gauls and Vandals would often carry two-handed broadswords that could do major damage with a single blow.

To combat this threat, the Roman soldier would block the oncoming enemy with his shield and force him to reel backwards or even to the ground. From here, the legionary could use his sword to deliver quick cut and thrust strikes before the enemy could recover.

The gladius was much more nimble than barbarian broadsword and even if the legionary were disarmed, he could use his shield as a blunt weapon. Alternatively he could reach for his secondary weapon: a short concealed dagger known as a pugio.


DISCIPLINE
If a soldier didn't perform his tasks well and failed his assignments, there would be strict punishments. These could range from a decrease in rations, to corporal punishment.


1 CONTUBERNIUM = 8 MEN
10 CONTUBERNIA = 1 CENTURY = 80 MEN
6 CENTURIES = 1 COHORT = 480 MEN
10 COHORTS + 120 HORSEMEN
1 LEGION = 4,920 MEN
4,920
(PLUS ADDITIONAL AUXILIARY TROOPS)

# HIERARCHY & STRUCTURE

## ORGANISATION WAS OF THE UTMOST IMPORTANCE TO THE WORLD'S FIRST-EVER PROFESSIONAL FIGHTING FORCE

The first division of the Roman army was the Manipular Legion, which was formed shortly after the city of Rome was founded in 753 BCE. Containing major influences from the phalanx tactics of the era, this initial army helped the Romans defeat rival settlements on the peninsula, such as the Etruscans, the Samnites, as well as Greek and Macedonian forces that had come across the Adriatic and Ionian Seas to the east. At this time, the soldiers formed more of a militia than an army per se but this was all to change in 107 BCE with the Marian Reforms. Instigated by general and statesman Gaius Marius, the reorganisation turned the army into a structured, professional force. There was now a standard pay for the new full-time legionary and unlike before the army didn't disband after every campaign. Men were now hired from all across Italy and the number of troops swelled considerably. This was the birth of the Roman war machine.

With the new structure came a new type of hierarchy. At the very top were the generals, known as legates, who would command a legion of thousands of men. The units would then be divided up further into cohorts of several hundred men and finally 80-man divisions known as centuries that would be controlled by a centurion who received around 18 times more pay than the standard legionary.

The Roman Republic became an empire in 27 BCE when Augustus assumed complete control of the senate. Within the new Empire, fresh tactics and formations began to appear. Armoured cavalry units became popular and provided a whole new type of warfare on the ancient battlefield. Shortly after cavalry, siege weapons such as the onager and ballista were used in some of the world's first-ever sieges.

# AUXILIARY STRUCTURE

## THE INFLUX OF MERCENARY FIGHTERS

As the Empire expanded, it required more and more manpower to defend its borders, so the army was forced to hire fighters from the occupied lands known as auxiliaries or auxilia. These former barbarians were trained in the ways of the legion and would be rewarded with Roman citizenship if they served for 25 years. The influx of soldiers from far-away lands did change the make-up of the army. An example would be the archers recruited from occupied lands in Asia Minor who used their bows to deadly effect. Auxiliaries also helped usher in a new era of chain mail and rounded shields rather than lorica segmentata and scutum. The auxiliaries' role was to support the main legion in their own specialised cohort. They were roughly paid a third of what a standard legionary received and were stationed away from their native lands to ensure they did not switch sides. This non-citizen corps aided the army greatly by making its tactics more diverse with new cavalry and archer units.

**"THIS NON-CITIZEN CORPS AIDED THE ARMY GREATLY"**

# THE LEGIONARY

## COMING FACE-TO-FACE WITH A ROMAN SOLDIER WOULD MAKE ANY BARBARIAN SHAKE IN HIS BOOTS, AND HERE'S WHY

**PILUM**
This long spear was thrown from a distance at the start of a battle to unsettle the enemy ranks.

**ARMOUR**
Made from strips of iron, a legionary's armour was tough enough to withstand barbarian blades.

**GLADIUS**
The Roman soldier would use this short sword for fighting at close quarters.

**SANDALS**
Known as 'caligae', these sandals were standard issue for the army.

**HELMET**
The Romans had a variety of helmet types including the coolus and montefortino. The one shown here is a cassis helmet.

**TUNIC**
To march long distances and still fight effectively, the Roman soldier's tunic was light, warm and comfortable.

**SCUTUM**
The iconic rectangular shield protected the whole body and enabled the testudo formation to be used.

**ROUND OR RECTANGULAR SHIELDS?**
The rectangular scutum was the iconic Roman shield, but legionaries throughout the Empire also carried circular shields, which copied Greek hoplite designs.

# FORMATION & TACTICS

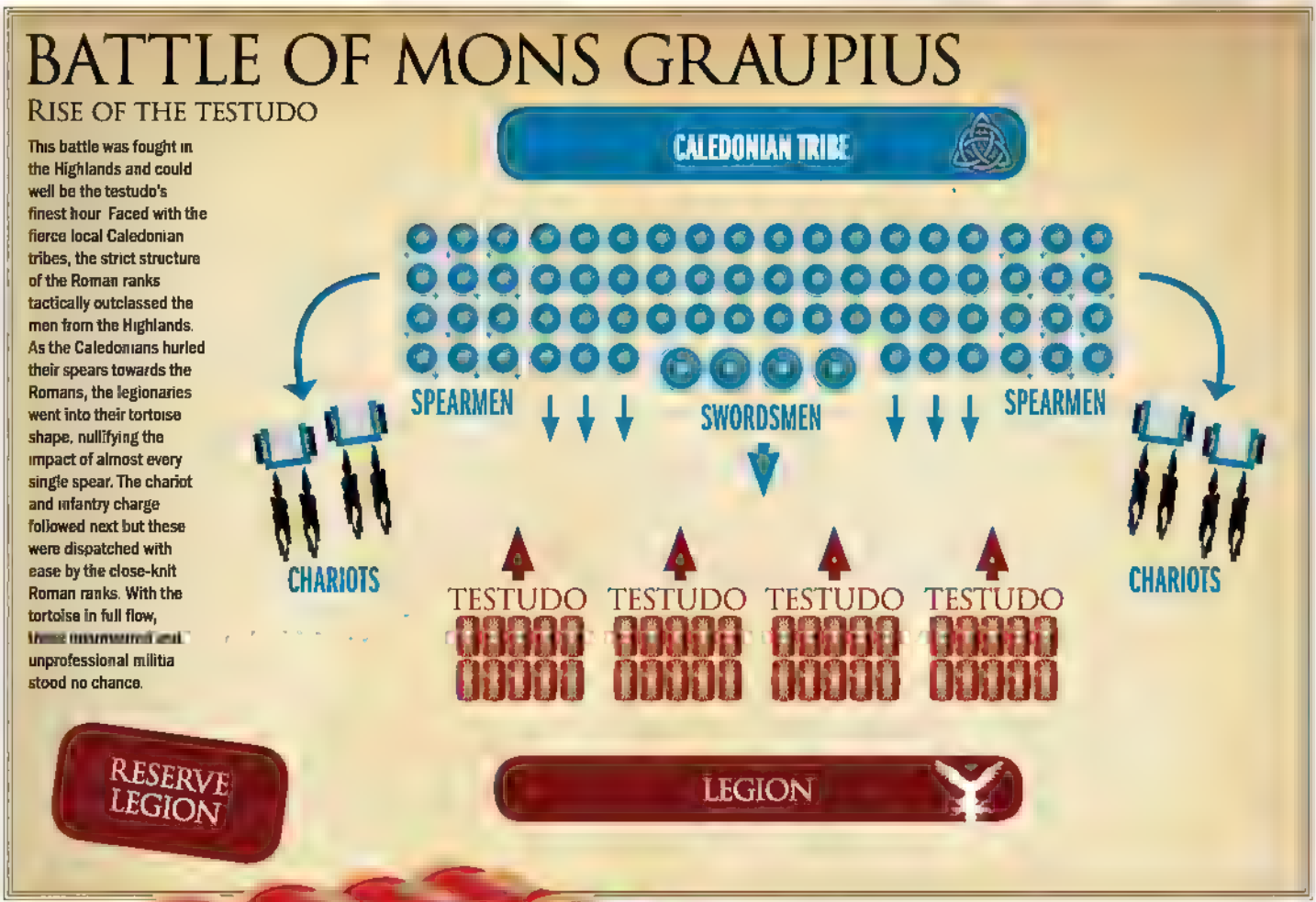
## The Roman battle line was unlike anything seen before and was ideal to deal with nearly any scenario

A professional and conscripted force, the Roman military introduced many new and innovative features of warfare. Prior to the Empire, the phalanx was the dominant tactic on ancient battlefields but the Romans successfully made this once great formation obsolete in a matter of decades.

## BATTLE OF MONS GRAUPIUS

### Rise of the testudo

This battle was fought in the Highlands and could well be the testudo's finest hour. Faced with the fierce local Caledonian tribes, the strict structure of the Roman ranks tactically outclassed the men from the Highlands. As the Caledonians hurled their spears towards the Romans, the legionaries went into their tortoise shape, nullifying the impact of almost every single spear. The chariot and infantry charge followed next but these were dispatched with ease by the close-knit Roman ranks. With the tortoise in full flow, [illegible] unprofessional militia stood no chance.




### TESTUDO

The testudo (tortoise) could be useful in both open battlefields and in sieges. Using their near-body-length scutum shields, a division of legionaries could be almost impenetrable to projectiles, as they edged closer to enemy forces or defences. The idea was developed from the Greek and Macedonian phalanx formation.

**Strengths:** Allowed advances into enemy territory while protected from projectiles.

**Weaknesses:** Could not launch a quick attack very easily.

### ORB

When a group was split from the main force and had been encircled by enemy troops, an orb formation would be deployed. This would only be used in desperation and as a sort of 'last stand', but could hold off enemies in order to gain valuable time for a retreat or escape.

**Strengths:** Useful for legionaries who had been detached from the main body of the army.

**Weaknesses:** Left vulnerable, isolated and easily surrounded.

## WEDGE

A more-aggressive formation than the testudo and the orb, the wedge made an effective use of the Roman sword of choice, the gladius. The soldiers would form a triangle shape with the tip facing the enemy and charge straight into the enemy. The idea was to disrupt enemy lines and make use of the gladius' advantage over barbarian broadswords in close-quarter combat.

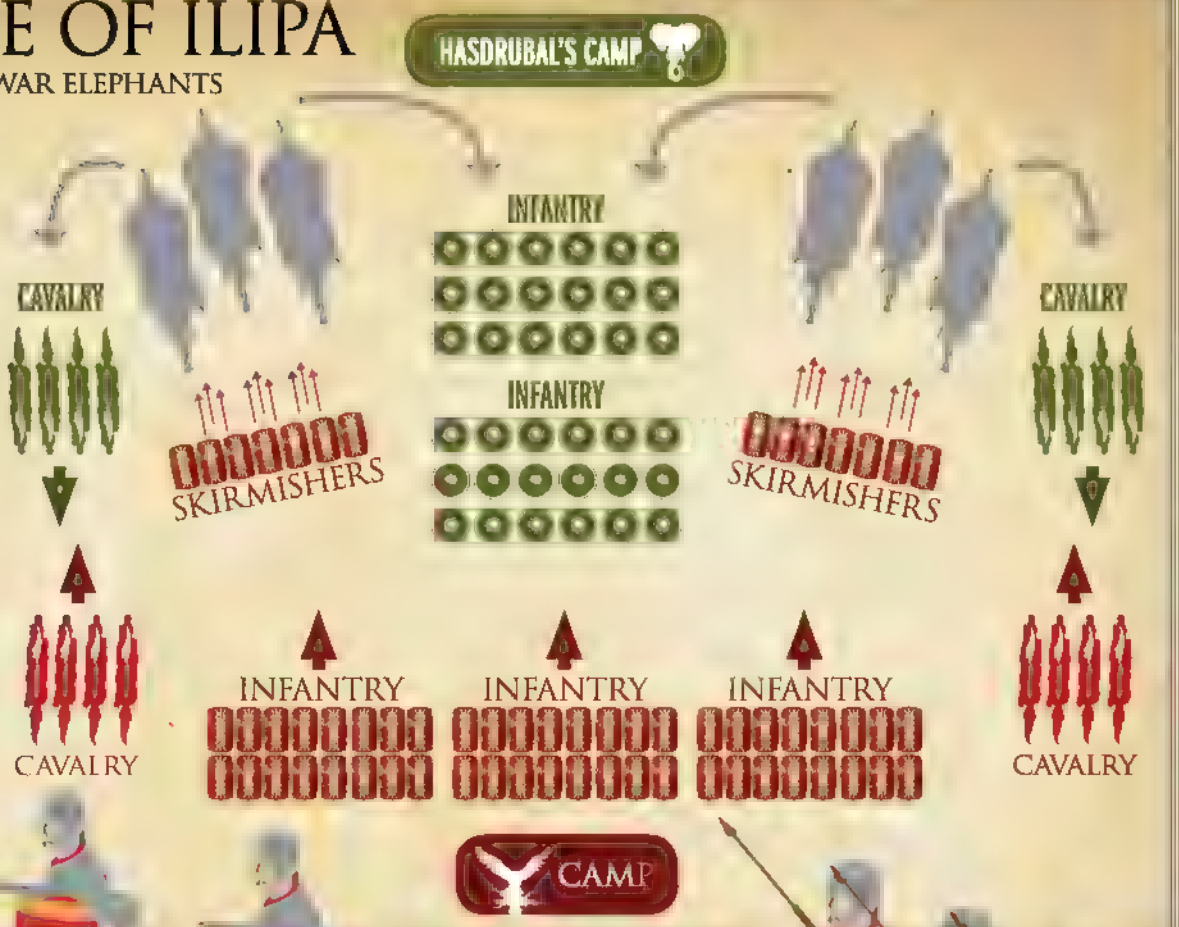
Strengths: Took the enemy by surprise.

Weaknesses: Risky strategy if not undertaken properly.

# BATTLE OF ILIPA

## COUNTERING WAR ELEPHANTS

The skirmish tactic was utilised superbly by General Scipio in a battle that effectively ended the Carthaginian grip on Spain. Facing a full elephant division and 10,000 more men, Scipio used his skirmisher (velite) troops to hurl javelins at the enemy camp before dawn. The Carthaginians scrambled to their posts and were met with the Roman army on their doorstep. In disarray they sent out their elephant divisions but the wide gaps in the Roman ranks meant the elephants did as much damage to their own forces as they did to the enemy before they were brought down by skirmisher javelins.



## SKIRMISH

The Roman army wasn't always organised into tightly packed clusters. What gave it the advantage over the phalanx was its ability to spread out and double the size of its ranks. This would enable the commander to make use of velite skirmisher units who hurled javelins at the enemy before the infantry rush.

Strengths: Very effective against phalanx tactics.

Weaknesses: Ranks vulnerable to a counter attack.

## ANTI-CAVALRY

On the ancient battlefield, the horse was the tank of the age. The Roman Legion devised a way to repel a cavalry charge by forming a tight barrier of shields with their pilum spears pointing out from the front. When faced with this wall, a horse would often pull up and then be at the mercy of the Roman archers.

Strengths: Effective tactic against a greatly feared weapon.

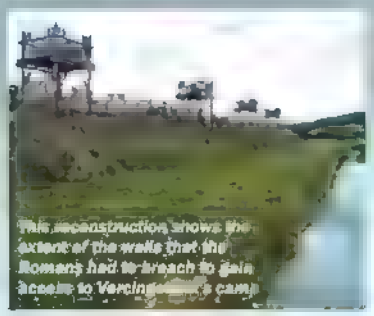
Weaknesses: If the horse refused to pull up...

# WAR ENGINES & SIEGES

## If a settlement stood in the way of the Roman juggernaut, the true power of the empire's siege machines would be unleashed

As the Roman war machine swarmed across Europe, it would occasionally come into contact with heavily fortified enemy forts and towns. By destroying these centres, the Romans could deal a sizeable blow to the enemy forces and plunder the city of its resources and riches.

The siege would begin with the construction of a series of forts and guard towers around the city. This would prevent any enemy reinforcements reaching the city and cut off the water and food supply to the defenders. If the settlement still resisted, the full force of a siege would begin.



This reconstruction shows the extent of the walls that the Romans had to breach to gain access to Vercingetorix's camp.

### THE BESIEGED CITY

Once victory was complete (this could take weeks, months, or even years), the Romans would pillage the city for everything of worth. The only survivors would be women and children for use as slaves in the Empire. In the siege of Syracuse, the Roman legionaries were under strict instructions to capture the Greek genius Archimedes alive, whose siege weapons had wreaked havoc with the Roman advance. Unfortunately the message was not heeded and one of the greatest thinkers in the ancient world was killed by a Roman gladius.

## FAMOUS SIEGES

Perhaps the most-important of all the Roman sieges was Carthage. The centre of the Carthaginian Empire, it was sacked in 146 BCE ending the third and final Punic War. Another famous event was the siege of Alesia, which signaled the ending of Gaul's resistance after Julius Caesar surrounded Vercingetorix's camp and successfully defeated the leader of the Arverni Gauls. There were also sieges at sea, with Syracuse being the most prominent example.

After a successful siege, the city would be razed to the ground in order to prevent any future uprisings and to send a message to other enemies. This image shows the once great city of Carthage.

### MINING

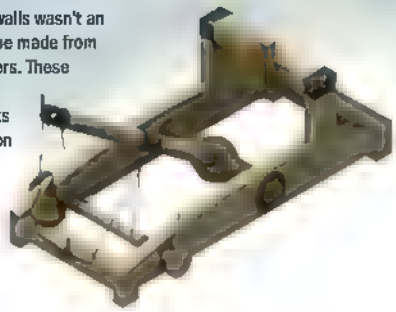
If faced by some particularly tough resistance, the legionaries would sometimes dig under the ramparts. Using the other siege engines as a distraction, hordes of soldiers could infiltrate inside the city, defeating the defenders from within.

### SCORPION

Torsion artillery was taught to the Romans by the Greeks, enabling the legions to create scorpions. Extremely accurate, this siege engine was one of the smaller Roman devices but this didn't stop its iron bolts causing chaos in enemy ranks.

### ONAGER

If getting close to the walls wasn't an option, attacks could be made from a distance using onagers. These catapults hurled rocks against the battlements from range using torsion mechanics. They were used to target archers on the battlements, or even the walls.



### BALLISTA

Rather than solely targeting the walls, ballistae were used against the rival infantry in a siege. Shooting giant metal bolts over 300 metres (984 feet), the ballista could strike fear into the heart of the enemy. This siege engine was the bigger, more-destructive brother of the smaller scorpion

### SIEGE TOWERS

Towers were essential to most Roman sieges. Wheeled up to the enemy battlements, they shielded troops from attack and enabled high defences to be scaled and breached. They could also house other siege engines to ensure they got as close as possible to enemy fortifications.

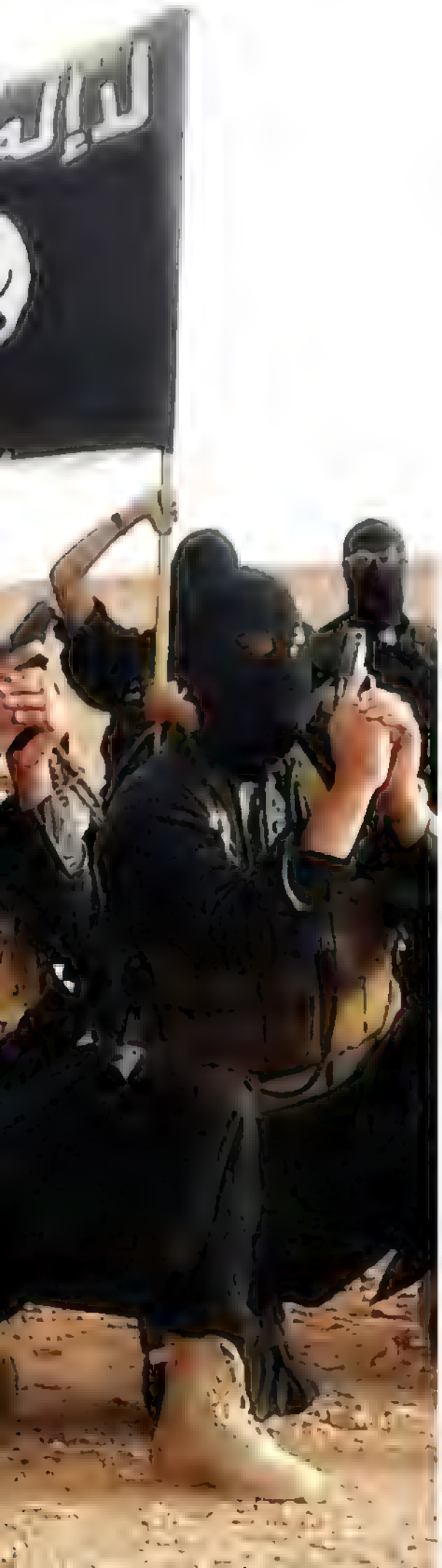
### BATTERING RAMS

Containing an iron hammer shaped like a ram, Roman battering rams could quickly reduce forts to rubble. The soldiers inside the ram were protected by wooden roofing as they targeted the weakest sections of the battlements. However, battering rams could occasionally be ineffectual when faced with strongly fortified walls.

Sol 90 Images, Mary Evans; Osprey Publishing

الشيخ أبي إبراهيم
SUNNI OR SHIA?
In Iraq, Shia Muslims make up the majority of the population despite being ruled by Saddam Hussein's Sunni regime from 1979 to 2003. ISIS describes itself as Sunni.
1.4%
Other

*Islamic State of Iraq and the Levant fighters pose in a propaganda photo released by the organization*





# The birth of ISIS

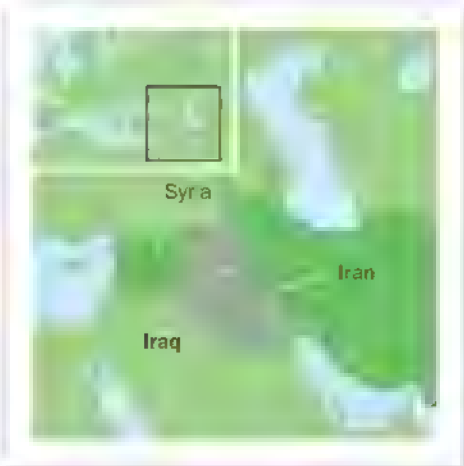
## Discover how Iraq's turbulent 20th Century helped create the powerful terror network that now threatens to swallow the nation whole

WORDS JACK GRIFFITHS

In the summer of 2014, an Islamic militant group came to dominate the news agenda. Known by all manner of titles (ISIS, ISIL and IS, to name a few), its objective is clear: to create an Islamic Caliphate - a whole nation ruled in accordance with the strictest definition of Islam's religious law. The majority of the Western world was first made aware of the group's actions on 10 June 2014 when 500,000 residents were forced to leave Iraq's second largest city, Mosul, after ISIS forces seized the area in a vicious assault. For the next two months the Islamic State of Iraq and Syria (to give it its full title) plundered and pillaged cities across both borders with such ferocity that government forces and international observers were left reeling. Thousands of people were displaced by the ethnic cleansing of minority groups and rival religious factions, and now live as refugees. After the United Nations decided to sanction air strikes on several ISIS targets, a series of televised beheadings took place showing the murder of journalists and humanitarian workers such as James Foley, Alan Henning and Steven Sotloff. Tensions remain high in Iraq in particular, as the Kurdish and Iraqi government forces do battle in the face of continuous ISIS offensives. The issue is far from resolved and is set to rumble on almost indefinitely as all involved parties show no signs of backing down.

So, how did ISIS form and why is there so much unrest in Iraq? ISIS was declared a terrorist organisation in 2004, but the origins of the conflict stretch all the way back to shortly after World War II when Iraq was still a monarchy and under indirect British rule. Since then, many factors have contributed to the gradual increase in violence and struggle in the region. ISIS action and attitudes are formed by its belief that the Levant – Syria, Palestine, Lebanon, Israel, Jordan, Iraq, Cyprus and parts of Turkey – should all be under strict Sharia law and based directly on their hardline interpretation of the Quran's teachings.

The group is also fiercely protective of the Sunni strand of Islam, and considers other forms to be against its ideological aims. This includes the Shia, who account for over half of Iraq's population. Further to its religious views, ISIS also believes in political Islamism and believes that the religion can guide followers in their economical and political life as well as their spiritual life. Here we shed some light on ISIS and the growth of militant Islam in the region, as well as how a century of Western intervention has created a complex tapestry of sectarian violence, religious fanaticism and fractious politics.




## FROM THE ASHES OF THE OTTOMAN EMPIRE TO THE RISE OF ISIS

**1918**
At the close of World War I, the defeated Ottoman Empire is partitioned up. Iraq then becomes a British Mandate.

**1920**
The Great Iraqi Revolution of 1920 is finally crushed after religious communities rebel against British rule. An Iraqi monarchy is formed around the Saudi-born Fasial I.

**1933**
King Fasial I dies and is replaced by his son Ghazi. In the same year, 3,000 individuals of Assyrian descent are massacred by Iraqis and Kurds.

## The Iraqi monarchy 1922-1958

Differences between the Sunnis and Shias are believed to have originally begun in 66 CE when the Sunni-dominated Umayyad Caliphate failed in its attempts to turn Iraq into a unified political community. Sympathy for ISIS's goals has its deepest roots here in this division, but sectarian notions were revived after the fall of the Ottoman Empire. The resulting power vacuum led to Western powers, especially the French and British, establishing rule over areas of the Middle East, including Iraq. King Faisal I, who had previously been ousted from rule in Syria, began the House of Hashemite line in Iraq. Naturally a ruler installed by the British wasn't overly popular and seven military coups were attempted during his reign. Faisal died in 1933 and was replaced by his son Ghazi bin Faisal – a Nazi sympathiser with a love of fast cars. He proved to be just as unpopular – a fact illustrated in the 1936 coup d'état. This was the first of its kind in the modern Arab world and represented the Kurdish and Shia anger against a Sunni-dominated government perceived to be acting firmly in the British interest. Led by Arab nationalist General Bakr Sidqi, the revolt was against the authoritarianism of the regime and severely weakened the constitution. This would open the door to the future disabling of the Iraqi elite and weaken the state. This era also signalled the end of the Assyrian voice in Iraq as the small minority was reduced further after a 1933 massacre by Iraqi and Kurdish forces that killed 3,000 men, women and children. The Assyrians, aside from being a Christian community that nursed a centuries-old feud with the neighbouring Kurds, had served the British in suppressing Arab revolts

Despite the various coups cracking its foundations, the monarchy staggered on under King Faisal II (1953-1958). It encountered trouble again in 1955 after the Baghdad Pact, designed to form a pro-Western military agreement between Turkey, Iraq, Iran, Pakistan, and the United Kingdom, faltered. This, coupled with the disastrous attack on Egypt by Britain, France and Israel in the 1956 Suez Crisis, crippled Faisal's rule, but the final straw came when the King opposed a plan to establish the United Arab Republic of Egypt and Syria. He was assassinated in July 1958 during the 14 July Revolution after losing control of both the people and the military. The interference of Western powers had now been effectively diminished in the country and the Iraq Republic was born. This event would go to show that Western intrusion was far from popular and although Britain justified reasons for its involvement, an anti-Western feeling was rapidly assembling and the extremist seeds had been sown.

## Birth of a republic 1958-1979

The 14 July Revolution in 1958 marked the end of the monarchy and the beginning of the Iraq Republic. The new prime minister was Abdul Karim Qasim, while Muhammad Najib Ar Ruba'I assumed the presidency. Both were Sunni

*King Faisal the I was the King of Iraq between 1921-1933*

*In July 1958, Colonel Aref and General Abdul Karim Qasim overthrew the ruling monarchy in a coup d'etat, and took control of the new Iraqi*

*Evacuees from Baghdad arriving at Esenboga Airport, Ankara, Turkey, 25 July 1958*

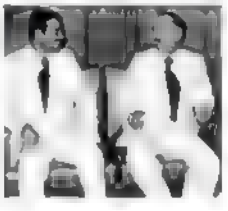


**1955**
1955 Baghdad Pact signed between Britain and Iraq becomes a failed attempt at a military agreement between the two nations.

**1958**
Dissolution of the monarchy after King Faisal II is assassinated in the 14 July Revolution. Iraq becomes a republic and British influence wanes.

**1963**
President Qasim is overthrown in the Ramadan Revolution after class strife and religious violence reaches a brutal boiling point.

**1968**
Ba'ath party takes power in Iraq under the leadership of Ahmad Hasan al-Bakr. Saddam Hussein becomes vice-president.



**1978**
Islamic Revolution in Iran puts the country under the leadership of Shia cleric Ayatollah Ruhollah Khomeini. Tensions rise with neighbouring Iraq.

Muslims but the prime minister held much more real power than the president in this era of Iraqi politics, as he also held the titles of defence minister and commander in chief. Both men relied heavily on the Iraqi Communist Party and the National Democratic Party (modelled on the British Labour Party) for support and so the government put their initial focus on reforms for the lower classes, while keen to avoid alienating the wealthy. Historically, Sunni Muslims were a minority in Iraq (an anomaly in the Muslim world, as Sunnis vastly outnumber Shias in other nations) so with the monarchy gone and British involvement at minimal levels, the streets were patrolled by a communist militia known as the People's Resistance Force and drastic reform was in the air. These socialist militants aimed to dismantle the near feudal structure in the Iraqi countryside and modernise the nation by force. This can be seen as another factor leading to the rise of ISIS. The presence of a large communist force in the country, plus an upheaval of the traditional way of living, was not popular with many Iraqis. The period also signaled the establishment of the Iraq National Oil Company (INOC). This black gold would fast become a feature in the region's fortunes

**"To this day he remains both a hero and a villain and historical interpretation of his regime is mixed"**

As national dissent grew, Prime Minister Qasim's popularity began to free fall. In an attempted coup in March 1959, an attack was made on his life by a young Sunni Ba'athist called Saddam Hussein. The Iraqi Ba'ath Party believed in pan Arab unification and freedom from Western involvement – policies that would become the standard in Hussein's forthcoming premiership. By 1961, revolts had reached extreme levels as fighting broke out between Kurdish guerrillas and the Iraqi army. After a series of internal conflicts, Qasim was overthrown in the Ramadan Revolution of February 1963. To this day he remains both a hero and a villain and historical interpretation of his regime is mixed. He successfully ousted the unpopular monarchy, but his leadership saw a increase in class inspired violence and an undoing of social structures. These would prove to be fertile for the discontent that fueled extremist movements like ISIS

Post revolution, a military government with a socialist leaning took charge. This was overall unsuccessful, as three presidents entered office in eight years, so merely formed a precursor to the Ba'ath Party's rise to power in 1968. The new president was a Ba'athist former army officer named Ahmad Hassan al-Bakr. By 1970, he had established a new constitution that sidelined pan-Arabism in favour of welfare and land reform. These socialist leanings unpicked Iraq's once strong ties with Iran and contributed to the growing

## THE FACTIONS OF IRAQ

### HOW POWER IS CURRENTLY DISTRIBUTED IN THE COUNTRY

When an area of Iraq is stated as being 'ruled' by ISIS, it doesn't necessarily mean that it's directly governed by the extremist group. Many areas are a middle ground between government (ISF, or Iraqi Security Forces) and ISIS control, or are ruled by Sunni faction sympathetic to ISIS. Other forces include Kurdish Peshmerga fighters and tribal groups.

*Kurdish Peshmerga T-55 tank crew outside Kirkuk in Iraq*

**1979**
Saddam Hussein becomes the president of Iraq after being the de-facto head for a number of years thanks to his growing influence.

**1980**
Iraq-Iran War begins and lasts nearly 10 years after over half a million deaths and no substantial military gains. Poison gas is used by Hussein against the Iranians.

**2 August 1990**
Iraq invades the neighbouring oil-rich nation of Kuwait, kick-starting the first Gulf War.

**7 August 1990**
Operation Desert Shield begins. Ground troops would be introduced later on in Operation Desert Sabre.

**28 February 1991**
A ceasefire is agreed as the Iraqi army is driven out of Kuwait. Saddam Hussein's regime remains in power.

**2002**
The first roots of ISIS begin as Jordanian terrorist Abu Musab al-Zarqawi forms the Tanzim Qa'idat al-Jihad fi Bilad al-Rafidayn, later known as al-Qaeda in Iraq (AQI).

insecurity between the two nations. In March 1975 Iran decided to close its border with Iraq. Within the country, Al Bakr faced opposition too. Dismayed at being marginalised, a resurgent Kurdish force rose in the north of the country. In response, the Ba'ath Party established its own militia of 50,000 men. The Kurdish resistance was crushed and in June 1975 the Patriotic Union of Kurdistan was formed to put a barrier between the warring factions. After the Kurds had been suppressed, Ba'ath power entered a period of relative consolidation in 1976. Al Bakr's cousin, security chief and vice president Saddam Hussein, whose influence was growing steadily, oversaw a swathe of successful economic policies as social mobility and the distribution of wealth increased. This improvement in education and healthcare was achievable primarily due to the increasing income from oil. By this point, the Ba'ath Party had total control and all other parties were deemed illegal. This power would grow again with the rise to power of Saddam Hussein in July 1979

## Saddam Hussein: Iraq's dictator

Many believe that Saddam Hussein's principal ideology was for Iraq to lead the Islamic world. The 1979 Islamic Revolution in neighbouring Iran threatened to endanger his belief. The return of Shia Muslim figurehead Ayatollah Ruhollah Khomeini as leader of the Iranian people was a great danger, as he had been expelled from Iraq by Hussein only a year earlier. These were two leaders with very different ideologies and Hussein feared the Iranian firebrand would sponsor a similar Shia insurrection in his own country.

The war began on 22 September 1980 and huge losses amassed on both sides with over 1 million casualties. There was no clear victor and both nations suffered a ruined economy and destabilised politics. Saddam portrayed the war in the same way that the USSR did with World War II: with fervent patriotism. This enabled him to secure emergency rules that tightened his grip and ensured totalitarian power. Saddam also, quite shrewdly, pumped the Iraqi army full of Shias to save Sunni bloodshed and render the conflict a Shia war. This astute scheme increased tensions between Sunni and Shia, which groups such as ISIS are now feeding off as they seek recruits. The war was made worse by a well timed Kurdish uprising, which affected both sides. This resistance was soon crushed with extreme force by Iraq, even reportedly using chemical weapons. The Iran-Iraq War (1980-1988) ended up being the longest conventional war in the entire 20th Century. Iraq is yet to recover from the effects and the huge death toll and social turmoil provided the perfect base for extremist politics and creeds.

## "Many believe that Iraq is still yet to recover from the effects"

*Saddam Hussein ruled Iraq for 24 years inciting divisions between Sunni and Shia*

After the devastating eight year war, Iraq desperately needed to rebuild its crippled economy, so in 1990 President Saddam Hussein turned his attention to invading the neighbouring oil-rich nation of Kuwait, with a view to increasing his control of the world's oil reserves to 20 per cent (and negating the US$14 billion debt he owed the Kuwaiti government for loans in the Iran-Iraq War). This sparked an armed response from the UN and major Western nations led by the USA

Initially only Operation Desert Storm bombing raids were undertaken, but when this was deemed insufficient, UN and US troops entered Kuwait on the ground in Operation Desert Sabre. Iraqi forces rapidly retreated and a ceasefire was declared on 28 February 1991. In what would later prove decisive, Western forces did not advance any further northward towards the cities of Basra and Baghdad to directly depose Saddam and instead outlined the terms of peace. Iraq was now in disarray Political and cultural differences were rife in the country and both the Kurds and Shia provided resistance to the Sunni majority in the country. The chaos in society would continue until 2003

**2003**
Conflict resumes as the Iraq War begins. US forces swiftly capture Saddam within a month. Coalition occupy Iraq.

**2004**
Al-Qaeda in Iraq (AQI) is officially declared a terrorist organisation by the US Bureau of Counterterrorism.

**20 May 2006**
Nouri al-Maliki becomes Prime Minister of Iraq.

**7 June 2006**
Musab al-Zarqawi is killed by a US airstrike on an AQI safehouse.

**30 December 2006**
Saddam Hussein executed by hanging after being charged with crimes against humanity by the Iraqi Special Tribunal.

**2010**
Abu Bakr al-Baghdadi takes control of AQI - now called Islamic State of Iraq (ISI). The US reward for his capture stands at US$10 million.

**2011**
The last remaining US and UK forces withdraw from Iraq. Other coalition troops left 2005-9.

when war officially broke out again and the now infamous phrase would come to the fore, 'weapons of mass destruction'. The Hussein regime was quickly defeated and the country was put under military rule in an attempt to restore law and order. The power vacuum that came with Saddam's absence was far more severe than many predicted as the beleaguered country became gripped by civil war. These conditions of unrest continued, with the numbers of relief troops ebbing and flowing up until 2011, when under the Obama presidency the final US troops were recalled from Iraq. The ground was now ripe for occupation by another not altogether unfamiliar power.

## 2003-2014: The aftermath of the Iraq War

After 24 years of the Hussein regime, Iraq entered a period of de-Ba'athification, where new groups and organisations emerged after being nullified during the old government. Power was originally held by the occupying Western forces and a provisional US-led government, but was transferred back to the Iraqi people in 2004 with the beginning of the new Republic of Iraq, which we still see today. After this, mainstream politics became dominated by the Islamic Dawa Party, which practiced the Shia branch of Islam and sought to return Iraq to this identity. The key figure during these years was Nouri al-Maliki who became prime minister in 2006 and only left office in September 2014. His rise to power came after a year-long civil war between rival Shia and Sunni factions. What followed was a mass purge of Ba'ath elites and civil servants, as well as a re-instatement of Shia doctrines as the dominant strand of Islam ahead of the Sunni.

The downside to mass de-Ba'athification was the negative affect it had on the Iraqi army. With the military hierarchy dismantled, the army was now very weak, so struggled to contain certain threats such as ISIS and al-Qaeda. Meanwhile, the country was now awash with former soldiers - jobless, disillusioned young men with army training and easy recruits for militant factions. There were also close ties between the new government, Iran and the Bush administration, a fact that made al-Maliki gradually unpopular among the Sunni community and his former Shia allies. The president at this time was Jalal Talabani, who was of Kurdish roots and was the first non-Arab president of Iraq. The sheer amount of different cultures and beliefs in and around Iraqi politics provided a dangerous melting pot with no single politician or organisation able to keep all cultures content. This, as well as the government's reliance on American and Iranian aid, has created the volatile post-war situation in the country that ISIS now utilises to its nefarious advantage.

*Militants of Islamic State before and after an explosion from an air strike on Tilsehir hill near the Turkish-Syrian border on October 23, 2014, from Yumurtalik village, in Sanliurfa province*

ISIS is an offshoot of the Iraqi branch of al-Qaeda (AQI), which gained popularity after the Iraq War and spread its control over large regions of the country. Its pseudo-governments initially gained a vast following but its brutal rule declined in an event that is now known as the Anbar Awakening, where Sunni Iraqis that made up most of its fighting force and support base, banded together to protect their communities and rebelled against AQI rule with US backing. With al-Qaeda's influence in decline from 2005, there was a clear vacuum for a new branch of Sunni extremism to fill.

ISIS was first formed in 2002 by Abu Musab al-Zarqawi, who had been asked to join al-Qaeda by Osama Bin Laden, but refused in favour of his new organisation, the Tanzim Qa'idat al-Jihad fi Bilad al-Rafidayn. This new group was extremely violent – so much so that even al-Qaeda warned against its actions. This had the dual effect of alienating many Iraqis, but also attracting a hardcore militia willing to undertake operations for the Islamic State. These actions contributed to the continual escalation of violence between Sunnis and Shias. As Zarqawi was killed in 2006 and extremist activity declined slightly as his group grew weaker. By 2011, however, it returned and successfully freed its members that were being held prisoner by the government. In 2013, it became officially known as ISIS and is now showing signs of overtaking al-Qaeda as the primary extremist group in the region.

As the conflict progresses, reports suggest that the key aim of ISIS is to establish a hardline Sunni Islamic state not just in Iraq, but in other regions of the Middle East and even North Africa. There is even a theory that former Iraqi military officers are supplying arms, manpower and tactical nous to ISIS. Experts liken the current situation to the Afghanistan takeover by the Taliban in 1994 and see the Kurds as possibly the main beneficiaries of the future Iraq, with their heartland largely untouched by Shia/Sunni conflict. Haider Al-Abadi became the new prime minister on 8 September 2014 and is reportedly determined to halt the ISIS threat. In all likelihood, it's only in the long-term that we'll see the full effects of Al-Abadi's administration.

Essentially, as long as the once-dominant Sunni population of Iraq feels alienated and marginalised by changing governments and new threats, ISIS will continue to survive - and thrive. This is what would have to be changed to end its threat, but Sunni equality cannot come at the expense of Kurds and Shias. As we have seen through Iraq's history, this is easier said than done.

**"In 2013, it is now showing signs of overtaking al-Qaeda as the primary extremist group in the region"**

**2013**
IS change their name to ISIS after merging with Syrian terrorist group Jabhat al-Nusra.

**February 2014**
Al-Qaeda severs all ties with ISIS after an eight-month power struggle.

**10 June 2014**
500,000 residents are forced to leave Mosul, Iraq's second largest city and the surrounding province as ISIS assume control.

**23 June 2014**
ISIS take over the city of Tal Afar and 50,000 residents are forced to leave.

**7 August 2014**
US President Barack Obama authorizes air strikes on ISIS strongholds.

**19 August 2014**
US journalist James Foley is the first to be killed in a series of televised beheadings.

**8 September 2014**
Nouri al-Maliki steps down as President of Iraq and becomes Vice-President. He is replaced by Haider Al-Abadi.

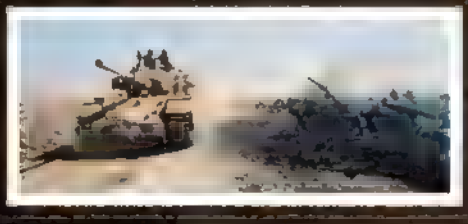
Alamy; Corbis; Getty; Prevention maps.com

# White House declassified

## A memorandum of a conversation between US President Gerald Ford and Senator James William Fulbright on Wednesday 2 July 1975, discussing the situation in the Middle East

By 1975 there had already been four wars between Israel and Arab nations since the turn of the century. The most recent was the 1973 Arab-Israeli War, where Egyptian and Syrian forces surrounded Israel but were eventually pushed back by an Israeli counterattack. A ceasefire was signed on 18 January 1974 but tensions still ran high. A year later, Israeli Prime Minister Yitzhak Rabin rejected an Egyptian offer of a peace accord. As a result, officials from both the United Nations and United States were called in to help smooth negotiations. These diplomats included the now legendary figure Henry Kissinger and little-known US senator James William Fulbright. This text is a write-up of a conversation between Fulbright and President Ford after the former's visit to the Middle East. Here Fulbright shares his opinions on the situation in the region and the effects action will have on Ford's domestic popularity.

Gerald Ford's foreign policy was a continuation of his predecessor President Nixon's ideology. Ford is quoted as saying "a strong defence is the surest way to peace. Weakness invites war." The president championed long-term agreements and improved relations with China, the Soviet Union and South Vietnam after the war. In the Middle East, he held meetings with the presidents and prime ministers of Egypt, Israel, Jordan and Syria in attempts to help quell conflict in the region. His diplomatic assistance helped improve peace talks between Israel and the Arab states and aided their government's resistance to extremist pressures and threats. The intervention resulted in the first ever agreement between an Arab country and Israel that wasn't directly negotiated to stop an ongoing conflict. Overall the US sent $4.2 billion (£2.63 billion) of aid to Israel. Despite all these efforts, war broke out again in 1982 between Isreal and its neighbours in the Lebanon War.



File scanned from the National Security Adviser's Memoranda of Conversation Collection at the Gerald R. Ford Presidential Library

MEMORANDUM

THE WHITE HOUSE

WASHINGTON

~~CONFIDENTIAL~~

MEMORANDUM OF CONVERSATION

| | |
|---|---|
| PARTICIPANTS: | President Ford<br>Senator J. W. Fulbright<br>Lt. Gen. Brent Scowcroft, Deputy Assistant to the President for National Security Affairs |
| DATE AND TIME: | Wednesday, July 2, 1975<br>11:04 - 11:35 a.m. |
| PLACE: | The Oval Office<br>The White House |

Senator Fulbright: I appreciate your giving me the time. I wouldn't take it if I didn't think it was important.

The President: It was a very timely trip to the Middle East. I would appreciate hearing your views, from your vast experience.

Senator Fulbright: Let me leave you this, which is by Jim Symington. [Tab A].

I visited seven countries. I was well received, but they think my views were a reflection of American foreign policy. I think it is imperative that you make a statement about our objectives before the election. The Arabs -- except Qaddafi -- are the most conciliatory they have ever been. They say that if Israel will go back to the '67 lines, they will recognize Israel. Iraq was not as forthcoming. They didn't indicate they would welcome a settlement, but they would not oppose it. But Iraq is just emerging from its isolation. That is breaking down now, with recent developments with Iran, Saudi Arabia and the Kurds.

In Syria, who I thought didn't like us, the Economic Minister is a graduate of New York University. He gave me two cordial hours.

The President: Henry really likes Asad. All the countries around Israel have a different attitude than they had before.

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*The 1973 Yom Kippur War killed over 10,000 people and led the UN and US to become involved in Middle Eastern matters once again*

During 1975, Ford frequently held meetings in the Middle East and gave aid to both Egypt and Israel in the hope of reaching a peace settlement and preventing future wars.

James Fulbright was a prominent Democrat senator from 1945 until 1974. He believed in the idea of nations working together in a peaceful existence.

-2-

Senator Fulbright: I used the Percy statement. I tried to explain the 76 Senator's letter.

The President: Those fellows who signed the letter -- they may support Israel, but I bet not to the tune of $2.5 billion.

Senator Fulbright: The key to my idea -- and I am a politician -- is the political angle. Not that you need this advice. I have talked to Laird, Kissinger and Ingersoll, etc. You are in a unique position, as a politician. You want to be reelected. Your political opponents are critical to Israel. The question is: can you win on it? I am convinced you need to make a positive statement. This is in Israel's own interest. They are so paranoid they don't know their interest. The Israeli Government is weak and can do it only if they can say that "the damned President forced us." This is the only way we can be free of the burden which has plagued your presidency.

The President: In the next months or year, we have to lay out a comprehensive plan. Now I think there is an advantage to an interim agreement. The chances are against it, and if there is no interim agreement, we have to go for a comprehensive plan. You know the Jews will attack me, but if we posture it right, we can say we tried an interim and we just couldn't get it. I will have $208 million people with me against 6 million Jews.

You may disagree with what we are trying to do on an interim. But that will put it on the back burner for six months or perhaps through the election.

Senator Fulbright: I would just like to get this burden off you. Implementation could wait until the election. But the Arabs need to know your objective. Arafat, of course, is in a more delicate position. I think he will in fact accept the West Bank and Gaza as a place for the Palestinians to call their own. What they do with it is their problem. In five years, with a settlement, Israel would have recognized borders. We just have to get by this damned war. The Jews are propagandizing and using the underdog strategy. They are sending around brochures. I will send you one.

The President: We have been sending them arms. They are better off than they were before the October war.

Senator Fulbright: They would win a war but that wouldn't help -- it would be a disaster.

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Heroes of the Victoria Cross

# HENRY DALZIEL

## World War I: Battle of Hamel, 4 July 1918

WORDS STEVE WRIGHT

When we talk about World War I, the focus seems predominantly on the battles of attrition fought between the British and German forces. We hear so much about the individual stories that it's easy to forget the roles that troops of other nationalities took on in the fighting.

One such individual whose story stands out is Australian Henry Dalziel. Born in the small mining community of Irvinebank, Queensland on 18 February 1893, Dalziel lived the life of a miner from a young age. He and his brother Victor were just children when they were credited with the discovery of a profitable abundance of tin samples – leading to the establishment of a mine that remained in operation until the 1960s. Prior to the completion of his education, he worked as an apprentice fireman, before encountering the event that would change his life.

Britain's entry into the war in August 1914 automatically meant the involvement of the entirety of its empire – including Australia. Over 416,000 Australians volunteered to fight during the course of the war, with Dalziel being among the earliest to go. Having enlisted as a private in the Australian Imperial Force on 16 January 1915, he was posted as part of a wave of reinforcements for the 15th Battalion, which was stationed in Gallipoli, Turkey. It was here that he, like many others, would discover the horror of war first hand.

The Australian Imperial Force joined with the New Zealand Expeditionary Force to form the Australian and New Zealand Army Corps (ANZAC) for the Gallipoli Campaign, fighting alongside the British and French forces, among others. Despite this show of strength, the campaign was plagued by disaster right from the start. Facing a well-drilled Ottoman army and hampered by bad luck and numerous tactical blunders, the Allies suffered terrible losses, with the ANZAC forces alone taking a loss of 36,000 casualties.

It was into this mess that Dalziel arrived in July 1915 as part of 500 reinforcements for the 15th Battalion. Having originally numbered over 1,000 men, the Battalion's strength had fallen to under 600. The entire unit was eventually replaced and restored to around 720.

### FOR VALOUR

*The Victoria Cross (VC) is the highest military honour awarded to service men and women in the Commonwealth. It is awarded for valour in the face of the enemy and can be given to anyone under military command.*

**WHY DID HE WIN IT?**

**For the utmost bravery and dedication to duty while serving for the Australian forces in World War I, in the process truly going above and beyond his duty while ensuring the success of his mission.**

**WHERE WAS THE BATTLE?**

**Le Hamel, Somme, France**

**WHEN DID IT TAKE PLACE?**

**4 July 1918**

**WHEN WAS HE AWARDED THE CROSS?**

**13 December 1918**

**WHAT WAS THE POPULAR REACTION?**

**News of his citation for the Victoria Cross was published in the 17 August 1918 edition of the *London Gazette*. Upon his return to Australia, he was reported as having received a hero's welcome from every train station on the way back home.**

Dalziel would continue to fight for the 15th Battalion throughout the Gallipoli Campaign serving as a machine gunner, for which he earned the nickname 'Two Gun Harry'. The most notable skirmish he was involved in was the Battle of Sari Bair in August 1915, which marked the British forces' final attempt to take control of the Gallipoli peninsula. Like other attempts before it, this would result in massive casualties, and it didn't come as a surprise when the whole costly operation was curtailed.

Before this, however, Dalziel's Gallipoli Campaign was to end early. Having developed rheumatism, he was evacuated to a hospital in Egypt, before being sent to London General Hospital, England, to recover. As it turned out, he didn't miss much of the campaign, and with military operations being ceased soon after, the ANZAC forces themselves were transported to Egypt to recuperate. It soon became a case of 'out of one frying pan, into another' though, as they were pointed in the direction of the dreaded Western Front.

Dalziel returned to battle in France on 14 August, just in time to serve in the Battles of the Somme – one of the bloodiest series of exchanges to take place on the Western Front. Serving as both a driver and gunner, he participated in the engagements at Mouquet Farm, Pozieres, Flers and Gueudecourt. All in all the combined Allied forces suffered over 623,000 casualties – yet Dalziel survived.

As the war progressed, Dalziel was to find himself involved with some of the most renowned skirmishes on the Western Front: first fighting at the Battle of Messines in June 1917, and later the Battle of Passchendaele of 1918. It was here that Dalziel would incur his second battle-inflicted hospitalisation. On 16 October, he was wounded in the leg by shrapnel in Polygon Wood, and again sent to England to rest and recuperate. Returning to France

**"This extreme show of bravery nearly proved to be his undoing. On his second venture into the crossfire, he received a horrific wound to the head that put him out of action"**

*ANZAC troops charging a Turkish trench during the Dardanelles campaign*

## Praise for a hero

**"His magnificent bravery and devotion to duty was an inspiring example to all his comrades and his dash and unselfish courage at a critical time undoubtedly saved many lives and turned what would have been a serious check into a splendid success"**

Official citation for the VC

*Allied troops eating lunch beneath a tree the day before the attack*

In June 1918, his life was soon to change again – he had survived the hell of Gallipoli and the swampy oblivion of the Somme and Passchendaele, but the moment that was to define him would take place at one of the War's most overshadowed moments.

On 4 July 1918, a combined attack by the Australian Corps and American forces was launched against German positions around the town of Le Hamel in France. The tactic of the 'creeping barrage' – artillery fire taking place ahead of attacks by infantry units – was mostly successful, but not everything went to plan. In some areas the artillery fire fell short, leaving the German forces free to assault the attackers with their heavy-duty Maxim guns.

It was in this manner that Dalziel's 15th Battalion would come under sustained assault. With dogged bravery Dalziel sprung into action, first silencing machine-gun fire from one direction with his Lewis gun, then charging towards another to take it out, along with its two-man crew. Free from harassing fire, his company could now advance.

Dalziel participated in the main assault along with the rest of his Battalion, which was heading south towards the village of Hamel via Hamel Wood. Despite receiving an injury to his hand, he carried on assisting by gathering as much ammunition as he could – putting himself under heavy fire in the process.

This extreme show of bravery nearly proved to be his undoing. On his second venture into the crossfire, his horrific head wound put him out of action. Regardless, he had helped his side achieve their target: they had won.

Dalziel's head wound was so severe that brain was visible, and to many it looked like he wouldn't make it. Demonstrating the kind of fortitude that had enabled him to survive one of the bloodiest conflicts the world had ever seen, Dalziel survived, although his recovery process would be a long and arduous one. After emergency surgery in Rouen, he was moved to hospital in England. It was here that he stayed until the end of the war, before being discharged and finally returning to Australia on 7 March 1919.

The 1,000th man to be awarded the Victoria Cross, Dalziel lived a varied life after the war. He married twice (he had three children with his second wife), and his work involved tending an apple orchard, farming, factory work and gold prospecting. He would eventually return to the military, serving as a sergeant in the Citizen Military Forces from 1933 onwards, and even re-enlisting for World War II (although he did not serve abroad. Instead he was charged with assisting recruitment and funding drives). After suffering from a stroke, Henry Dalziel died on 24 July 1965 at the Greenslope Repatriation Hospital in Brisbane. A true hero of the Victoria Cross, his story will never be forgotten.

## CITATION FOR VICTORIA CROSS

**For most conspicuous bravery and devotion to duty when in action with a Lewis gun section. His company met with determined resistance from a strong point which was strongly garrisoned, manned by numerous machine-guns and, undamaged by our artillery fire, was also protected by strong wire entanglements. A heavy concentration of machine-gun fire caused many casualties, and held up our advance. His Lewis gun having come into action and silenced enemy guns in one direction, an enemy gun opened fire from another direction. Private Dalziel dashed at it and with his revolver, killed or captured the entire crew and gun, and allowed our advance to continue. He was severely wounded in the hand, but carried on and took part in the capture of the final objective.**

**He twice went over open ground under heavy enemy artillery and machine-gun fire to secure ammunition, and though suffering from considerable loss of blood, he filled magazines and served his gun until severely wounded through the head. His bravery and devotion to duty was an inspiring example to all his comrades and his dash and unselfish courage at a critical time undoubtedly saved many lives and turned what would have been a serious check into a splendid success.**

**01 Under heavy fire**
While approaching the Pear Trench (so named because of its shape), the 15th Battalion is met by heavy German machine-gun fire from this position. Earlier artillery assaults destroyed many other German positions, but this one remains intact due to the barrages falling short, which duly causes the Allied troops problems.

**02 Taking the fight to the enemy**
The Australian Lewis gun operators are tasked – at high risk, considering how exposed they are – with providing covering fire for the advancing riflemen. Dalziel shows his aptitude by silencing the enemy Maxim guns in one direction with his Lewis gun, thus relieving some of the pressure on his Battalion.

**03 Going solo**
As the German forces open up fire with a Maxim gun from another direction, Dalziel takes more of a direct approach. Carrying just a revolver, he charges at the enemy gun while under fire – in the process killing the gun's two-man crew and capturing another.

**04 The final assault begins**
With these obstacles cleared, the 15th Battalion continues to advance south towards the Vaire trench and Hamel wood, before heading for the village of Hamel itself. Dalziel remains with his unit while they press forward, despite having taken an injury to his hand amid the chaos.

**05 The last stand**
Despite his wounds, Dalziel continues advancing with the rest of his unit, twice venturing out under heavy artillery and machine-gun fire to gather ammunition, before continuing to reload and fire his weapon. He is eventually put out of action by a serious head wound, but ultimately survives the battle.

*Ed Crooks*

# VIETNAM
# THE UNTOLD STORY

## A country's fight for independence and unity that spans centuries

It was a cold night on the 2 November 1963 as rebel forces broke into the Gia Long palace in South Vietnam. The invasion marked a climax to days of attacks of government and loyalist army buildings across the country, and the rebels were looking for one man: Ngô Đình Diệm, the president of South Vietnam. The palace fell into rebel hands by daybreak, and Diệm surrendered after being promised safe exile. The president was arrested and bundled into the back of an armoured personal carrier before promptly being shot. His assassination would make headlines around the globe, but just what had driven his own people to do this? Why did the United States care so much about the fate of the president of this remote Asian country?

The assassination of Diệm was not only the catalyst for a war that would rock the foundations of the most powerful nation on earth, but also the culmination of discontent that had been building for hundreds, if not thousands of years.

Vietnamese history is almost as long as the history of man itself, and some of the earliest civilisations of the world thrived there. Uniquely situated between sea, mountains, rivers and jungles, those who tried to attack Vietnam found their attempts to be disastrous, but once the invaders were successful the country was unable to shake them off. For 1,100 years the people of Vietnam bowed to Chinese emperors and the Vietnamese culture was slowly and methodically scrubbed out until little remained of a Vietnam before Chinese presence. The country became simply an extension of China and as long as the empire remained strong, Vietnam would continue to bow. But when the Chinese dynasties fell into decline, the spirit of the Vietnamese people emerged and they enjoyed several periods of independent rule before being snatched under China's wing again. They returned to bowing and speaking Chinese, but this period of self rule had given the Vietnamese people a taste of independence, and they wanted it back.

At the start of the 15th Century Le Loi, a wealthy landowner, was finally pushed to breaking point by Chinese oppression and started his own movement of national resistance. Although it took ten long years of fighting, the Vietnamese managed to force China out of their country. Le Loi consequently became a national hero and emperor of the Vietnamese dynasty. Vietnam flourished with art, literature, education, agriculture and fairer laws throughout the country. It also experienced a rapid period of growth and even began to gain territory to the south, but it was this push that would create a divide that would plague the country for hundreds of years. Vietnam had previously always enjoyed a large central government, but when Le Loi was eventually overthrown, it found itself divided into two separate governments, one in the north and one in the south.

For years the two sides engaged in bouts of civil wars, revolutions and political chaos, with one regime overthrowing the other over and over again. It wasn't until 1801 that Nguyen Anh, a member of the Southern royal family, emerged victorious from a 14 year long conflict

with the backing of the French. The land was finally united and given back the original name it's known as today – Vietnam.

But the 900 years of independence would come to a swift and bloody end in the late 19th Century. Countries all around Europe had their sights set on the land rich with coal, iron and gold, but it would be France who made the boldest move. After trickling missionaries into the country, the French military soon followed to stop the perceived persecution that was happening, and ten slow but steady years later France abandoned all pretences and launched a full invasion. After a long and brutal campaign the Vietnamese were left with no choice but to agree to turn North and Central Vietnam into French protectorates in 1883, and over the next ten years Laos followed suit. What was once Chinese, then briefly Vietnamese, was suddenly now a Western protectorate. France poured itself into every inch of Vietnam and anyone who resisted, even emperors, were disposed and replaced. France immediately set about draining the land dry of all its natural resources; rather than setting up a stable government, the focus was on instant profit, which was invested anywhere except the land it came from. Economic development in Vietnam came to a near complete standstill as its people toiled, sweated and died in the mines and fields

French rule continued into the 20th Century, but Vietnam didn't experience any of the boons of the new age, with an 80 per cent illiteracy rate, just one university for 20 million inhabitants and two doctors per every 100,000 people in 1939. Even the educated minority found themselves locked out of the world of trade, property and all modern enterprises, which were gripped tightly in French hands. These few educated Vietnamese could see the world developing outside and they wanted to be a part of it, so they did everything they could, even attempting to collaborate with the French to push through political reforms. But all their attempts to follow the law failed and they quickly realised the only way to mould Vietnam into the world they wanted it to be was to break free from the shackles of colonial rule. As the world was engulfed in the First World War the nationalist movement rapidly swept across Vietnam, but it was during the Second World War that Vietnam was offered its biggest opportunity for change.

When France was defeated during World War II, Vietnam became a French-administered possession of Japan. 30,000 Japanese troops streamed into the country and Vietnam found itself serving as the central base for Japanese military operations in Asia during the war. As the end of the conflict approached, the Japanese hurriedly ousted the French influence in the country and Vietnam's independence was hastily declared with a Vietnamese government created. Of course, this was simply a mask – the true power still laid with the Japanese and it wasn't until the end of

## THE FRENCH CONNECTION

**COUNTRY:** FRANCE
**STRENGTH:** 190,000 FRENCH UNION SOLDIERS, 55,000 LOCAL AUXILIARY AND 150,000 IN THE STATE OF VIETNAM FOUGHT FOR THE FRENCH IN THE FIRST INDOCHINA WAR
**YEARS:** FIRST CONTACT OCCURRED AS FAR BACK AS 1620. FRENCH INDOCHINA WAS FORMED IN 1887
**ALLIES:** CAMBODIA, LAOS, STATE OF VIETNAM
**UNITED STATES**

French involvement in the region began with missionaries in the 17th Century and their work encouraged French involvement throughout the 19th Century. It wasn't until 1858, and an attack on the Da Nang port city, that French involvement turned military. Commanded by Napoleon III, the attack was masqueraded as an attempt to stop the persecution of missionaries, but in reality the territorial gains were essential for establishing overseas markets for trade. 14 ships and 2,500 men stormed the harbour and occupied the town. Saigon was next on the list, but Vietnamese resistance slowed the invaders and it took until 1861 for the French to gain the three adjacent provinces. Witnessing the superior strength of its enemies, the Vietnamese government signed a peace treaty with France and handed over control of the territories. Over the next 16 years France tightened its hold on the country, and its victory over China in the Sino-French war in 1884 added North Vietnam to its territories. French Indochina was formed, with local Vietnamese rulers given the illusion of power without any real control. French officials were running the country de facto. Vietnam's raw materials and natural resources were exploited, and immediate high returns were the main concern, with the French benefiting. This encouraged the class system of Vietnamese landlords with landless tenants and before the Second World War half the population of Vietnam were landless. Along with the low salaries, lack of medical care and horrendous working conditions, to the Vietnamese people capitalism became synonymous with foreign rule and all the oppression that came with it.

*During the French occupation of Vietnam, all Vietnamese were expected to be obedient and subservient to the French*

## "WHAT WAS ONCE CHINESE, THEN BRIEFLY VIETNAMESE, WAS SUDDENLY NOW A WESTERN PROTECTORATE"

*The French aboard an M24 chaffee*

# THE VIET CONG

## *THE GUERRILLA FIGHTERS THAT WOULD BRING DOWN AMERICA*

When the Viet Minh were successful in the Indochinese war, they took control of northern Vietnam and the country was divided into a communist north and non-communist south. In order to unite the country, some 5,000 to 10,000 Viet Minh stayed in the south with orders to stir up political activity. This group came together under the name Saigon-Cholon Peace Committee in 1954 - the first incarnation of the Viet Cong.

The southern prime minister, Diem, drove this new organisation out of the centre of his country and into remote areas – as far at the world was concerned, the communist resistance in South Vietnam was all but vanquished. But North Vietnam bided its time, and from 1957 to 1958 southern communist fighters launched small scale raids as well as targeting and assassinating South Vietnamese officials who threatened the uprising.

By 1959 a "people's war" had been declared on South Vietnam by the northern communists and the uprisings that followed created small areas of Viet Cong controlled zones. Finally in 1960 the National Liberation Front of South Vietnam was created, with the Viet Cong serving as the military arm of the force. The movement became rapidly popular, attracting thousands of sympathisers from North Vietnam who streamed into the south to join the fight.

*A Viet Cong soldier crouches in a bunker with an SKS rifle*

### GRENADES

The Cong were armed with rocket-propelled grenades and mortars designed to destroy heavily armoured vehicles. They assembled these homemade devices from leftover explosives, tin cans and wires.

### ARMED BY ALLIES

China and Russia supplied the Viet Cong with Chinese versions of the Russian AK-47 assault rifle. They were also armed with a range of light, medium and even heavy machine guns to take down helicopters.

### THE HIDDEN ENEMY

One of the most powerful tactics of the Viet Cong was to disguise themselves as ordinary peasants, so they would wear civilian clothes and ambush unsuspecting enemies. However the main force would later wear black uniform.

**"BY 1959 A PEOPLE'S WAR HAD BEEN DECLARED ON SOUTH VIETNAM BY THE NORTHERN COMMUNISTS"**

the war and Japan's surrender that Vietnam saw its true opportunity to seize control. With their enemies disorganised and distracted, the communist Viet Minh organisation rose up and seized power in the northern capital, Hanoi. But France was having none of this – determined to keep a grip on its Indochinese territory it returned and took control of Cochinchina in the South of Vietnam in 1946. Yet again Vietnam found itself torn in two, with a communist north and a non-communist south.

At first things seemed peaceful, France agreed that Vietnam could operate as a free state in the French union, and it would gradually remove troops over the next five years. But this was all a guise – secretly the Viet Minh would accept nothing less than total independence, while France wished to return to the days of colonial rule. When France took actions to declare Cochinchina an independent republic in June 1946, it didn't take long for the two opposing forces to finally air their disagreements out in the open. On November of that year the French launched a naval bombardment at the port of Haiphong after a dispute about import tax. Many Vietnamese citizens perished in the attack, with some estimates as high as 6,000 deaths. The Viet Minh retaliated brutally, sending 30,000 men into the city, and even though their immense numbers failed to overwhelm the superior military of the French forces, it set off a chain reaction of rebellions and fighting across the country

The French military was confident of victory, and the Viet Minh were forced underground, waging a guerrilla war against their age-old invaders. The Viet Minh quickly developed devious tactics for dealing with the French forces – whenever they sent large armies in to attack, they would disperse and disappear into the jungle, aware that facing the Western force head on would be suicidal. By 1949 France was ready to negotiate and willing to recognise Vietnam's independence as a state within the French Union. For the disillusioned and determined Viet Minh this was not enough, they had heard the guises of promises before, and France's thinly veiled words really meant that they would still control the country. They rejected France's offer, and when Chairman Mao Zedong took control of China, they found themselves with a very powerful communist ally. Chinese military supplies poured into Vietnam and caught the attention of an even bigger nation – the United States of America. Already in the midst of the cold war and increasingly alarmed by any possible threat of the spread of communism, the states began to supply France with military aid to put an end to the Asian communists

But the Viet Minh were gaining speed. By 1950 both China and the Soviet Union recognised Ho Chi Minh, the leader of the Viet Minh, as the true leader of Vietnam. Although France enjoyed a short period of success aided by the use of napalm, supplied by the United States, they slowly began to realise that the war was unwinnable. The conflict climaxed at the battle of Dien Bien Phu where a 40,000 strong Viet Minh force decimated the French defence. The French colonial forces were unable to recover and in 1954 they brought the Viet Minh to the negotiations table at the Geneva Conference

Over four months it was agreed that the country would be officially split into two separate military zones, with all Viet Minh to stay north of the line, and all French forces and their Vietnamese support to remain

**"CHINESE MILITARY SUPPLIES POURED INTO VIETNAM AND CAUGHT THE ATTENTION OF AN EVEN BIGGER NATION – THE UNITED STATES OF AMERICA"**

## THE RISE OF THE COMMUNISTS

*THE PERILOUS BUT UNSTOPPABLE RISE OF THE IDEOLOGY THAT WOULD DEFINE VIETNAM*

### 1924

**THE ARRIVAL OF HO CHI MINH**

An important communist figure, Ho changed the anti-Vietnamese patriotic movement into a revolutionary force. Minh and his "men in black" team helped win many military victories over the French and Japanese occupations of Vietnam and founded the Viet Minh. After the first Indochina war he was made president of North Vietnam and aimed to reunite Vietnam under communist rule.

### 1925

**ESTABLISHMENT OF THE VIETNAMESE REVOLUTIONARY YOUTH ASSOCIATION**

Founded by Ho Chi Minh, the Thanh Niên was the first communist organisation in Vietnam. The main aims of the organisation were to end French colonial occupation and establish independence. The group encouraged the spread of their communist ideas by targeting intellectuals and schools, organising student strikes and attracting the attention of young

### 1930

**THE COMMUNIST PARTY OF VIETNAM**

After Thanh Niên split, they were united again by Ho Chi Minh to form the Communist Party of Vietnam. Although at its birth it had a small membership of 1,500, several bad harvests caused the party to gain support. The group organised many marches and rallies. While the group was eventually destroyed, it continued to be held in high regard by the general population

### 1941

**LEAGUE FOR THE INDEPENDENCE OF VIETNAM**

After the elimination of the Communist Party, Ho Chi Minh formed the League for the Independence of Vietnam. They first focused on gaining public support against the Japanese and French occupation of the country, and quickly attracted recognition. Despite their leader being imprisoned and tortured, the group's numbers increased to a membership of 500,000 by the end of 1944

## 1945

### THE AUGUST REVOLUTION

The August Revolution was a mass uprising organised by the Viet Minh to claim Vietnamese independence. While the French and Japanese forces were distracted, the Viet Minh followers finally emerged from their secret bases and led revolts in the major towns and cities of Hanoi, Saigon and Hue. The Japanese emperor was forced to abdicate and on 2 September 400,000 Vietnamese people gathered in the capital to hear the proclamation of the Vietnamese declaration of independence.

## 1946

### BATTLE OF DIEN BIEN PHU

On March 13, Viet Minh worked to build up its numbers and supplies before a full-scale war broke out. The Battle of Dien Bien Phu began as a French ploy to draw the Viet Minh forces out and then destroy them with advanced weaponry. But French blunders led to their ultimate defeat and withdrawal from the region. The north was formally given to Ho Chi Minh and the Viet Minh and for the first time a non-European colonial movement defeated a modern Western power, with the communists finally in control of the north.

## 1946

### RISE OF THE VIET CONG

Many of the southern Viet Minh who were forced to relocate to the north after the Indochinese war came together to form the National Liberation Front. These insurgents were given training and returned to the south to encourage insurgency and unite the two sides. They eventually were crucial to the Tet Offensive in the Vietnam War, which although crippling to Viet Cong numbers served to cause disillusionment and the eventual withdrawal of American troops. The Viet Cong was dissolved in 1976 when the country was finally united.

south. Eventually a final declaration was put forward that would allow elections to be held, in an effort to unify the country. France and the United States knew very well that the Viet Minh would win this election, and they refused to sign. The north of the country was left to recuperate its war-damaged land and create a new country, while in the south the anti-communist Roman Catholic Ngo Dinh Diem was put in place as president, supported strongly by the United States

The American government, ever wary of the communist Viet Minh forces of the north, made sure Diem focused on a policy of strengthening his militia and eliminating all opponents. The majority of the population, which was Buddhist, suddenly found themselves placed second after Roman Catholics, and anyone who expressed contempt for the president was sniffed out by an elitist underground organisation. Aware of his unpopularity, Diem refused to take part in the Vietnamese election to finally unite the country, but the decision proved disastrous The furious communist northern forces launched an insurgency movement in a mad grapple for power and Diem paid the price

The retaliation in the south was immediate, the few liberties the anti-Diem Buddhists had previously enjoyed were snatched from them by the new militant government in 1965. Anyone who attempted to rise up against the

*Buddhist monk Thich Quang Duc protesting against the Vietnam war by setting himself on fire 1963*

**"THE AMERICAN GOVERNMENT, EVER WARY OF THE COMMUNIST VIET MINH FORCES OF THE NORTH, MADE SURE DIEM FOCUSED ON A POLICY OF STRENGTHENING HIS MILITIA"**

*After a hard fought war the Viet Minh enjoyed a parade of victory through the streets of Hanoi in 1954*

# THE FIRST INDOCHINA WAR

**FOLLOW THE WAR THAT BEGAN AS A REBELLION AND LED TO ONE OF THE MOST SIGNIFICANT CONFLICTS IN HISTORY**

CHINA

VIETNAM

LAOS

DIEN BIEN PHU

HANOI

HAI PHONG

### 1947 OPERATION LEA Bac Kan

After being defeated during hostilities in Hanoi, General Võ Nguyên Giáp of the Viet Minh is forced to retreat his forces to the hills of the Tuyên Quang Province. French forces are quick to attack his bases, but the Viet Minh troops refuse to face them directly in battle. Instead the French military launches operation Lea, to strike its opposition at the core in Bac Kan. 9,000 Viet Minh soldiers are killed – a major setback for the Vietnamese forces.

### 1950 FRENCH GARRISONS FALL Cao Bang

Giap and his Viet Minh forces manage to take control of the French garrison at Lai Khê in Tonkin. He goes on to attack another garrison of Cao Bang, but the French are ready and the attack fails. However, the insurgency continues and leads another offensive against the garrison as well as Đông Khê and they finally fall into Viet Minh hands.

### 1954 THE BATTLE OF DIEN BIEN PHU Dien Bien Phu

Everything finally comes to a head at the Battle of Dien Bien Phu. The Viet Minh begin with a surprise attack of heavy artillery, and block the only road into the town, stopping French supplies from entering. Knowing their position is weakened, the Viet Minh hammer French forces with Russian-supplied rockets. The French army is overwhelmed, and although it's instructed to not use the white flag, the forces are all but defeated.

### 1950 THE VIET MINH FIGHT ON Lang Son

Giap sets his sights on the 4,000-strong Lang Son. French forces attempt to distract the Viet Minh by air-dropping a paratroop battalion near Cao Bang but this is defeated quickly, and after an intense fight that lasts a week Lang Son is claimed by Giap. The loss of the garrisons is crippling to the French army with 4,800 troops killed or captured, 2,000 wounded and thousands of weapons destroyed or captured by the enemy.

### 1953 THE FINAL CONFRONTATION Dien Bien Phu

Navarre decides to use the town of Điện Biên Phủ to block the Viet Minh invasion of Laos in Operation Castor. The French forces gain control of the valley of Dien Bien Phu, but Giap too sees this as an opportunity. Giap sends his forces in and they quickly wipe out the French patrols in the hills around the town.

### 1950 FRENCH FORCES STAND FIRM Hanoi

The new French commander, Jean Marie de Lattre de Tassigny, takes action and builds a fortified line of concrete fortifications and weapon installations from Hanoi to the Gulf of Tonkin, known as the De Lattre Line. This is a huge gain to the French as it keeps the Viet Minh from invading further inwards.

### 1953 A NEW STRATEGY Laos

Giap changes his strategy and invades Laos and the French outposts there. Navarre, now supreme commander of the French forces, reports that "there is no possibility of winning the war in Indo-China."

### 1951 THE VIETNAMESE BLUNDER Vinh Phuc

Giap launches an attack on Vinh Yên, Mao Khê and another at Phat Diem but is brutally defeated at all. De Lattre uses these defeats to his advantage, driving the Viet Minh back into the jungle and wiping them away from the Red River Delta. This spells an all-time low for the Viet Minh forces, who experience high casualties and begin to question the efficiency of the communist government.

### 1952 THE VIET MINH RISE AGAIN Hoa Binh

The Viet Minh manage to come together once more with several attacks on Hòa Bình, which force the French army back to the De Lattre line. They also cut supply lines and continue to launch raids and attacks against the enemy, slowly wearing down the resolve of their enemy.

*The Viet Minh celebrating their victory at the Battle of Dien Bien Phu*

government was immediately imprisoned, and any opposing political parties were forbidden from criticising it. However, there was one critical element out of their control – the steady and alarming strength growing in the north. Born out of the Viet Minh, the Viet Cong – a strictly communist organisation – was booming under a large stream of new recruits and its ranks swelled from 30,000 to 150,000 in just two years. Anti-southern movements in the south were increasing too, with the growth of the National Liberation Front (NLF) gathering a huge following in four years. The message was brutal and obvious – the southern regime was in sudden and immediate danger and it didn't have a hope of maintaining power alone. Any government set up in the south was ended swiftly with a coup, while the north was only getting stronger.

America had been supplying the regime in the south for some time, with military and financial aid, as well as 700 advisors to the army. As the hostilities in the country grew, the advisors followed in kind and by the end of 1963 there were 17,000 American advisors in Vietnam. Soon US helicopter pilots joined them, but in Washington the president was getting twitchy. American aid seemed to be doing nothing to stop the growing communist power in the north, and with the south capital of Saigon at the point of being crushed, President Johnson decided to send a clear message to the north – America was standing with the south and unless it wanted to arose the full might of the army, they needed to back down. In February 1965 Johnson unleashed a brutal bombing raid on North Vietnam, hoping that it would finally put an end to the Viet Cong advances into the south.

For extra measure, America sent more of its troops into the south, but this had the complete opposite effect than desired. Witnessing the horrific bombing across the country, and the presence of more and more foreign troops on their land once again, the Vietnamese found something that seemed lost long ago – national pride. Even those previously sympathetic to the south began to change allegiance to North Vietnam, as history seemed to be repeating itself again. Another batch of foreign invaders, another war to unite the land that seemed irrevocably split down the middle, and another chance to finally achieve the independence they had so long been fighting for.

## CHINA AND VIETNAM

***CHINESE INFLUENCE AND PRESENCE IN VIETNAM STRETCHES BACK BEYOND 111 BCE AND THE TWO COUNTRIES' HISTORIES ARE INTERTWINED IN A LEGACY OF INVASIONS, RESISTANCE, AS WELL AS CULTURAL AND POLITICAL EXCHANGE***

China had long been involved with Vietnam before it came to rule it. For a hundred years the two nations engaged in battles until the country was finally conquered by the Han Dynasty in 111 BCE. China was quick to put its stamp on the land, which became divided into nine districts – all with Chinese names. This acculturation continued into every aspect of Vietnamese life with Chinese language, customs and culture enforced without delay.

The Chinese also forced the feudal Vietnamese society into the modern world by installing waterways, roads and introducing new farming tools, weapons and animals – all these things were put in place to ensure China's control of the area, as well as sapping Vietnam of its ample resources. As Vietnam developed thanks to China, it also housed a very key part of its national identity – the desire to rule itself. Rebellions challenged Chinese rule repeatedly, and Vietnam managed to snatch its independence several times before it was conquered again and again by different Chinese dynasties – from the Han to the Tran to Sui to Tang. Vietnamese insurrections erupted out of any disturbance or decline in the dynasties taking advantage of their weakened state and snatching control at the first chance.

Although Vietnamese forces were able to establish a period free from Chinese rule for several hundred years, in 1407 China returned and exploited the country for all it was worth – carting the national archives and Vietnamese intellectuals off to Chin. Slave labour and heavy taxation reigned supreme, although the later Chinese rule was only for a period of 20 years it was an incredibly damaging time that the Vietnamese people would not soon forget.

## "AMERICAN AID SEEMED TO BE DOING NOTHING TO STOP THE GROWING COMMUNIST POWER IN THE NORTH"

*A B-52D dropping bombs over Vietnam*

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# TIGER I

## One of the most advanced Axis panzers of the Second World War, the Tiger I struck fear into the hearts of Allied tank crews

Between August 1942 and the fall of the Third Reich, approximately 1,500 Panzerkampfwagen VI Tiger Ausf.E were manufactured by the Nazi war machine.

Renowned for its accuracy and strong armour, this heavy tank was a formidable foe to the Allied forces. It outclassed many of the Sherman tank models in several departments and tales told from the war have described 75mm rounds bouncing straight off the Tiger's solid armour.

The tank saw its first action in September 1942 as the Third Reich advanced eastwards under Operation Barbarossa. In an engagement near Leningrad, four Tigers managed to dispatch 24 Soviet T-34 tanks. In fact, the Tiger only floundered when it became stuck in the harsh conditions

## PANZERKAMPFWAGEN VI TIGER AUSF.E

**COMMISSIONED** August 1942
**ORIGIN** Kassel, Germany
**LENGTH** 8.45m (27.7ft)
**RANGE** 5,000m (16,404ft)
**ARMOUR** Electro-welded interlocking nickel-steel plates
**ENGINE** Maybach HL 210 P45
**PRIMARY WEAPON** 88mm cannon
**SECONDARY WEAPONS** 7.92mm MG-34 machine guns
**CREW** 5

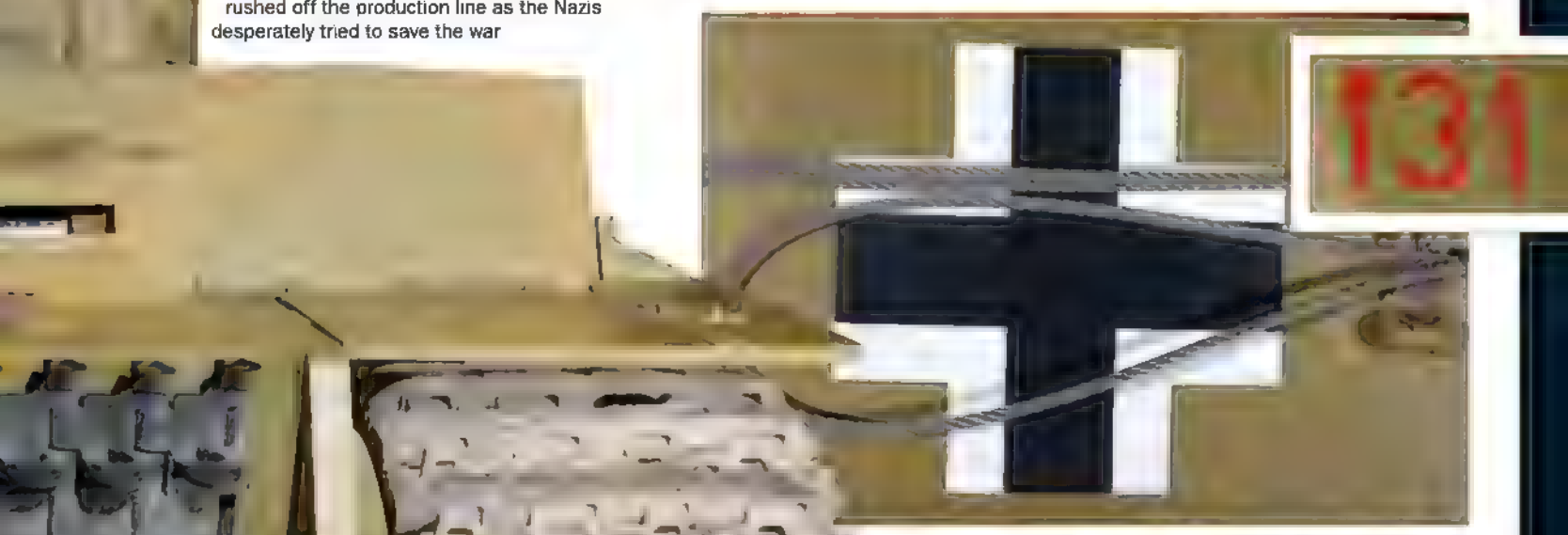
the Russian winter, where its caterpillar tracks would become trapped in the dense, frozen mud of Eastern Europe. This meant the nimble T-34 could now outmanoeuvre the Tiger and strike where the armour was weakest. The Allies had no answer to the sheer power of Panzerkampfwagen VIs until the development of the Sherman Firefly in 1943, which finally matched Tigers pound for pound. Before this, only wave after wave of Shermans and T-34s could bring about the downfall of a Tiger.

By 1944, German factories had hurried the Tiger II into production and the numbers of the Tiger I dwindled. Contemporary reports suggest that the Tiger I was over-engineered and, towards the latter stages of its lifespan, rushed off the production line as the Nazis desperately tried to save the war

*A Tiger I tank rolling across the battlefields of Europe was a frightening sight for any Allied soldier*

Bundesarchiv, Bild 101I-299-1805-16 / Scheck / CC BY-SA

**"THE ALLIES HAD NO ANSWER TO THE SHEER POWER OF PANZERKAMPFWAGEN VIs UNTIL THE DEVELOPMENT OF THE SHERMAN FIREFLY"**




*Above The tank has insignia showing its battalion and allegiance to the German Wehrmacht. This particular model was found abandoned in the North African desert*

Bundesarchiv, Bild 101I-022-2938-27 / Nitvater / CC BY-SA

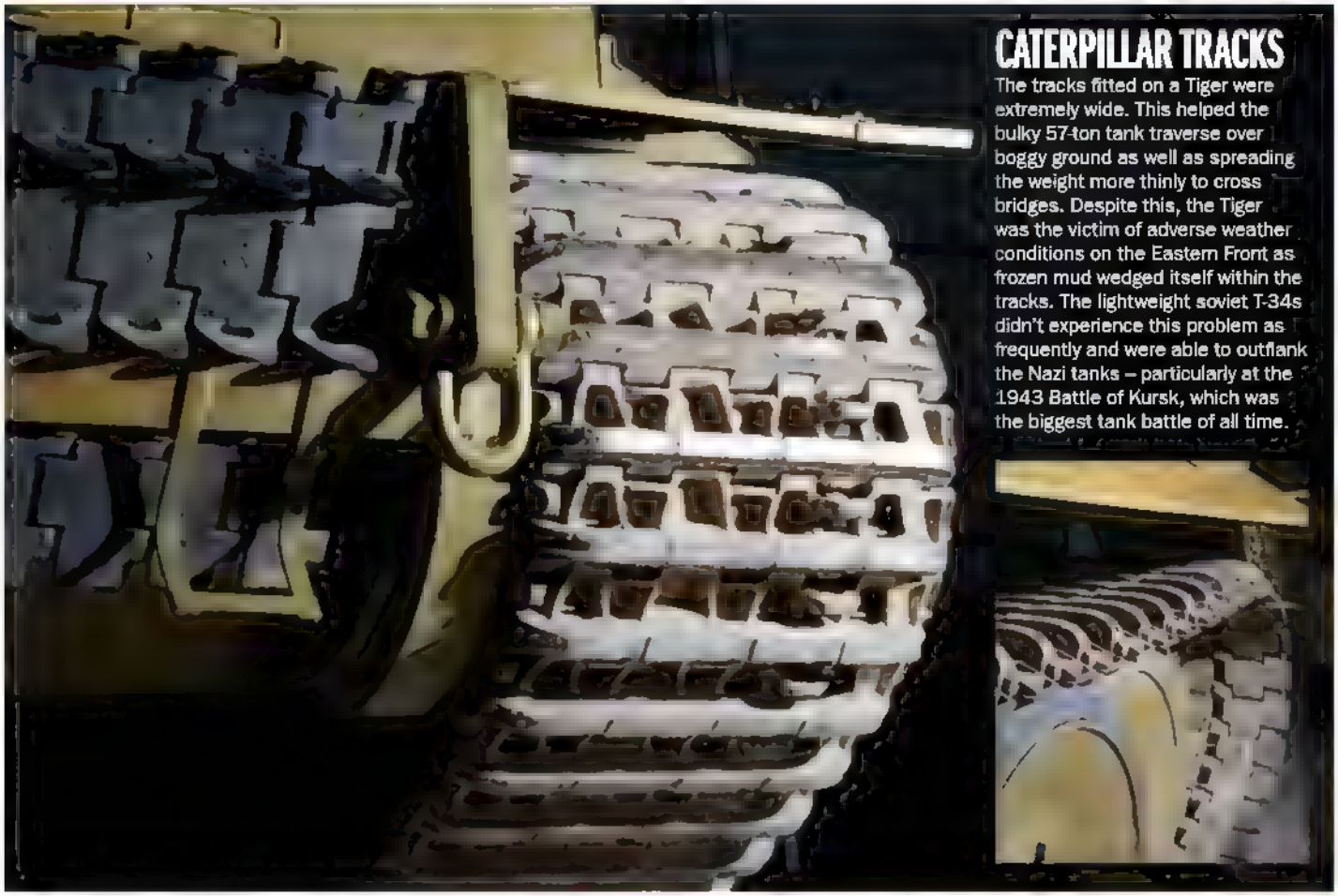
## 88MM GUN

The main weapon of the Tiger could shatter the defences of Allied tanks and fortifications. The 88mm gun could penetrate 100mm of armour from up to 1,000 metres (3,280 feet) away. On the battlefield, the Tiger would be strategically placed on hilltops to make use of its cannon's long range while being protected from enemy fire by its thick armour.

Above The panzer's ammunition varied from armour-piercing shots to high explosive and incendiary rounds

Bundesarchiv, Bild 183-J14931 / Rothmeister / CC-BY-SA.jpg

The huge 88mm Panzergranate 39 gun dwarfed the allied M4 Sherman cannon and was originally an anti-aircraft gun



## CATERPILLAR TRACKS

The tracks fitted on a Tiger were extremely wide. This helped the bulky 57-ton tank traverse over boggy ground as well as spreading the weight more thinly to cross bridges. Despite this, the Tiger was the victim of adverse weather conditions on the Eastern Front as frozen mud wedged itself within the tracks. The lightweight soviet T-34s didn't experience this problem as frequently and were able to outflank the Nazi tanks – particularly at the 1943 Battle of Kursk, which was the biggest tank battle of all time.

## SECONDARY WEAPONS AND AMMUNITION (TWO 7.92 MG-34 MACHINE GUNS)

As well as its main cannon, the Tiger was fitted with MG 34 or MG-42 machine guns. A Tiger tank would have one next to the driver at the front of the tank and on some models an MG would be attached to the top of the vehicle. These machine guns could reach distances of up to 400m (1,312ft) and 5,850 rounds would be kept aboard to cut down swathes of infantry and light vehicles.

## THE TIGER II

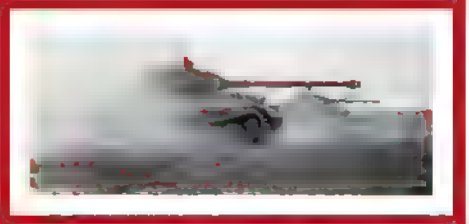
### THE TIGER WASN'T THE MOST FEARSOME OF THE NAZI PANZERS. THE TIGER II WAS BIGGER, STRONGER AND BETTER PROTECTED

**MAIN GUN**

The Tiger II's main gun packed a marginally more powerful punch than the Tiger I as it could penetrate 182mm (seven inches) of armour at double the distance. This was also further than Allied tanks of the period. Known informally as the Königstiger, only 492 of these mighty machines were made.

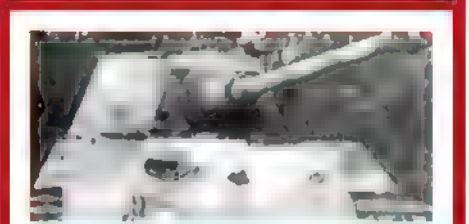
**ARMOUR**

The armour was nearly 200mm thick on the Tiger II, and significantly more than its predecessor. The Allies tried to create equivalents but tanks such as the American T29 were not ready for World War Two. The Tiger IIs were rushed into production and were often hampered by ill-suited engines.



**KING-SIZE**

The Tiger II was a heavy tank and its bulk was even larger than the Tiger I. The original Tiger already had issues with its engine so the larger size of the Tiger II emphasised these problems even more. Only in use at the tail end of the war, we will never know how it could have contributed to the earlier stages of the war.



*Images: Bundesarchiv, Hamann / Wagner*

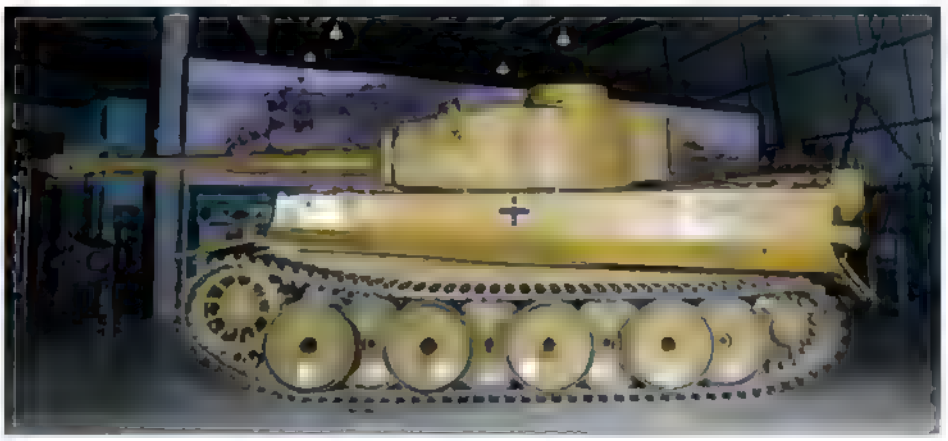
## INTERIOR

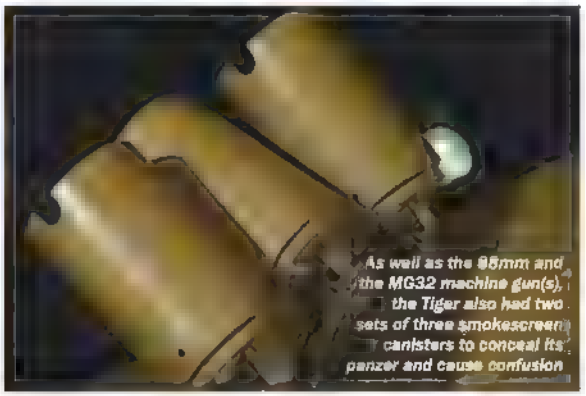
The Tiger's small enclosed interior contained a crew of five: a gunner, loader, driver, commander and a radio operator. Although small, the Tigers were over-engineered by their manufacturers, so the interior was packed with modern sighting equipment, weapons caches and tools. The drivetrain was aided by hydraulic power assisted steering and the entire mechanism was powered by four batteries. The whole tank was so advanced that when it was captured by the British, it was inspected by Winston Churchill and George VI and then taken back to Britain for extensive testing.

*Despite its large exterior, the inside of a Tiger was a cramped place where fires were a frequent problem*

**Below** *The Germans insisted on using a 641bhp (478kW) 21 litre petrol Maybach HL210 engine in their Tiger I tank*

**Below** *The panzer contained an escape hatch if the main lids were under fire or had been blown off*

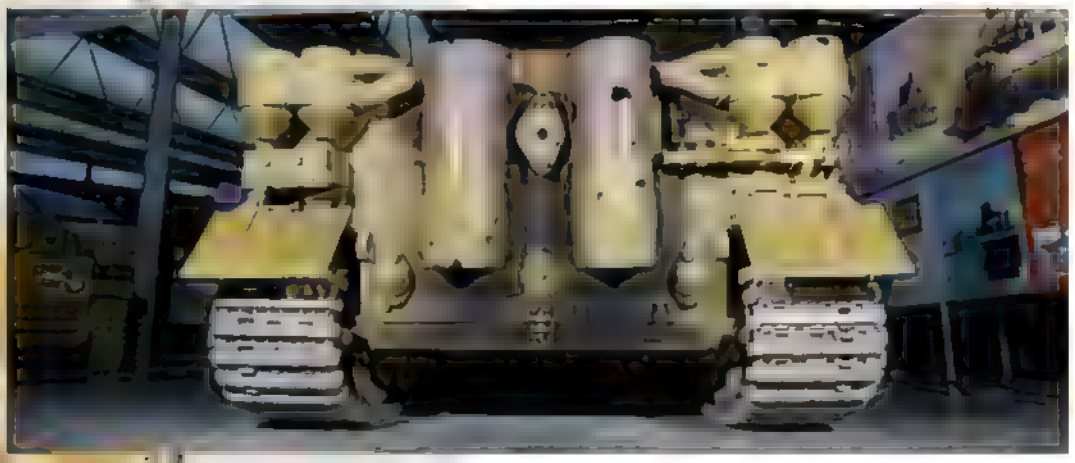




As well as the 88mm and the MG32 machine gun(s), the Tiger also had two sets of three smokescreen canisters to conceal its panzer and cause confusion

## THE TIGER 131

This Tiger model was part of the 504 Schwere Panzer Battalion in North Africa and was one of the very few not to have been destroyed by its own crew. Forensics and analysis have shown that the Tiger was hit several times by British Churchill tanks but none disabled the tank. The main damage was dealt just underneath the barrel and wedged the turret to the hull. This stopped the it from working, but could easily have been repaired by the crew. This makes it even stranger that the crew abandoned it and didn't destroy it as they were instructed to. It's the only working Tiger currently in existence and was featured in the 2014 film *Fury*.

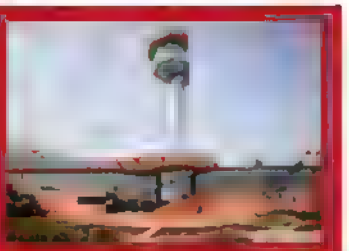


The Tiger had a complex exhaust system on its rear to increase power

**Below** *The well-engineered Tiger was a box of tricks and had cables and even a spade to help retrieve it from sticky situations*

## THE TANK MUSEUM

Situated in the Bovington Army Camp in Dorset, The Tank Museum was opened in 1947. It contains over 300 vehicles from 26 different countries, from the First World War Mark I tank to the currently serving Challenger 2. Tiger 131 was given to the museum in 1951 and is one of the most popular tanks in the entire museum. There is now a 'Tiger Day' every spring, which explores the history of the tank, as well as its many contemporaries from the Second World War. Visit **www.tankmuseum.org** for opening hours, admission information and more!



# BOOK REVIEWS

History of War's pick of the newest military history titles waiting for you on the shelves

## HITLER'S FIRST VICTIMS AND ONE MAN'S RACE FOR JUSTICE

**Author** Timothy W Ryback **£12.99** **Publisher** The Bodley Head

There has long been a debate about whether the Nazi Holocaust was pre-planned or whether their international network of death camps and murder squads evolved over time as an inevitable consequence of policy. It's one of history's darkest subjects, and in *Hitler's First Victims* Timothy W Ryback explores it with a compelling tale of a quiet hero who stood up to the might of the Third Reich at the precise moment the killing began.

When the Nazis first came to power, one of the first acts of the newly elected regime was to establish a concentration camp in Dachau – a chocolate-box town just outside of Munich that was, at the time, an artists' colony and home to some of Germany's most progressive intellectuals. That was on 22 March 1933. Within three weeks of operation, the first deaths had occurred at the camp when four Jewish inmates were shot while apparently trying to escape.

Cue Joseph Hartinger, a by-the-book prosecutor from Munich tasked with investigating the killings. He arrives at the newly established camp not knowing what to expect, and discovers a huge barbed wire complex filled with inmates terrorised by paramilitary thugs. He also finds the four victims' still warm corpses dumped in a shed, all with precision gunshot wounds to their heads. Something, he realises, is very wrong.

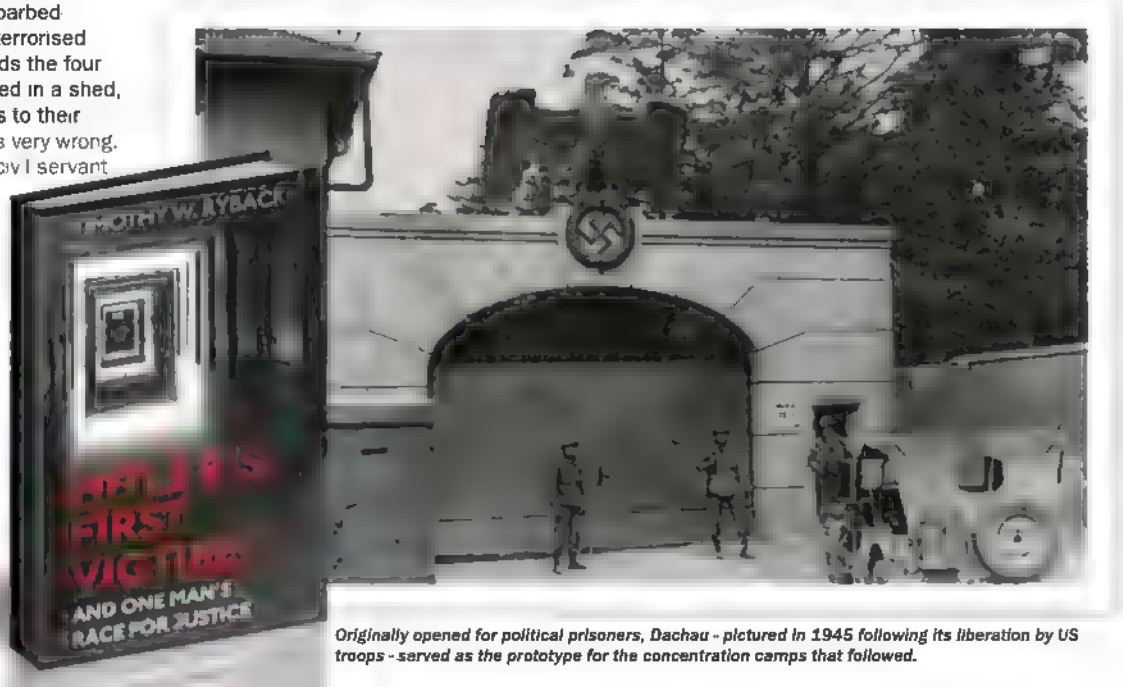
Up until then, the 39-year-old civil servant had dealt mainly with minor misdemeanors, and juvenile crimes. This was something entirely different, though, and stirred in the straight-laced lawyer a deep sense of injustice. He couldn't have known it, but Germany was on the cusp of a dark age where criminal acts would soon become state policy. The four murders were among the first clues as to what lay in store for the country under the newly elected Nazi Party, but at this stage the killings, to Hartinger at least, were simply illegal – and he set out to prove it.

As his investigation progressed, Hartinger began to uncover what was really going on behind Dachau's wrought iron gates, as a disturbing culture of brutality and violence began to emerge. Before long, the initial quartet of deaths were supplemented by a slew of suspicious suicides and further shootings, the official accounts of which just didn't stack up against the forensic evidence.

For a brief period, the stink Hartinger caused managed to paralyse the Nazi killing machine, the camp commandant was removed and the murders stopped. But one man was never going to hold up history for long, nor was Hartinger going to see the SS guards who'd committed the murders brought to justice while the Nazis controlled Germany's judicial system. His proposed indictments were quashed by Munich's Chief Prosecutor, who'd evidently been got at by Himmler and his hoods, and Hartinger was removed from office. As he later recalled, "It was a sign of a sick world. Yes, the world was ill. And unfortunately especially the German people."

Although the Nazis discussed his extermination, Hartinger was spared. Initially transferred to another jurisdiction and then drafted into the Wehrmacht, ending the war as a POW. Miraculously, his meticulous case studies also survived the conflict, and as the newly democratic Germany began to atone for its past, these documents were used to finally bring those guilty for the very first of what eventually totalled more than 20 million murders to justice. However, when efforts were made to honour Hartinger for his courage and decency, the ever-pragmatic civil servant dismissed them all, insisting, "I was only doing what my sense of duty demanded." Truly humbling stuff.

> **"Hartinger began to uncover what was behind Dachau's wrought-iron gates"**




*Originally opened for political prisoners, Dachau - pictured in 1945 following its liberation by US troops - served as the prototype for the concentration camps that followed.*

# THE WOMEN WHO SPIED FOR BRITAIN: FEMALE AGENTS OF THE SECOND WORLD WAR

**Author** Robyn Walker **£16.99** **Publisher** Amberley Books

Continuing the current interest in women's roles in World War II – particularly those lingering in the shady area of espionage and backstage machinations – this book from Canadian author Robyn Walker divides into eight parts, each telling the story of a courageous (and sometimes treacherous) female agent. Walker's work makes for relatively lightweight reading, but there are few corners of WWII that are genuinely dull and for many, this may be an new area of interest.

If you already know the subject, there are some familiar names among the book's main players. Special Operations Executive officers Odette Hallowes and Violette Szabo are particularly well-known figures in WWII history; regardless, their stories still make for intriguing reading. In Szabo's case, whose re-telling clings to the notion of her as a daring and beautiful character, it's a stark reminder that not all war heroes have a happy ending.

Other agents included are decorated servicewoman Nancy Wake, Diana Rowden, Sonia Butt, and Russian Allied agent Noor Inayat Khan. The author takes time in fleshing out the individual stories, immersed with details that paint of picture of wartime espionage to be as fearless and exciting as we'd all like to imagine. However, as with the romanticized characters Walker creates out of these real-life women, one can't help but feel a dramatic narrative is the priority here, not pulling apart the story behind the legend.

Most fascinating is the inclusion of French Resistance agent Mathilde Carré. Clearly her story is the most intriguing of them all, though because she turned traitor on the Allied Forces, leading to her eventual imprisonment. It's difficult to know how much of what's written on her character here is accurate, or whether it's clouded by the notorious public image she's accrued since her trial in 1949.

Whatever the case, there's an interesting – if not necessarily happy – story behind each of these women, and one told with enough drama and character to make this a worthwhile addition.

*Odette Sansom Hallowes served the SOE in France in 1942 and 1943.*

# CHURCHILL'S SCHOOL FOR SABOTEURS

**Author** Bernard O'Connor **£9.99** **Publisher** Amberley Books

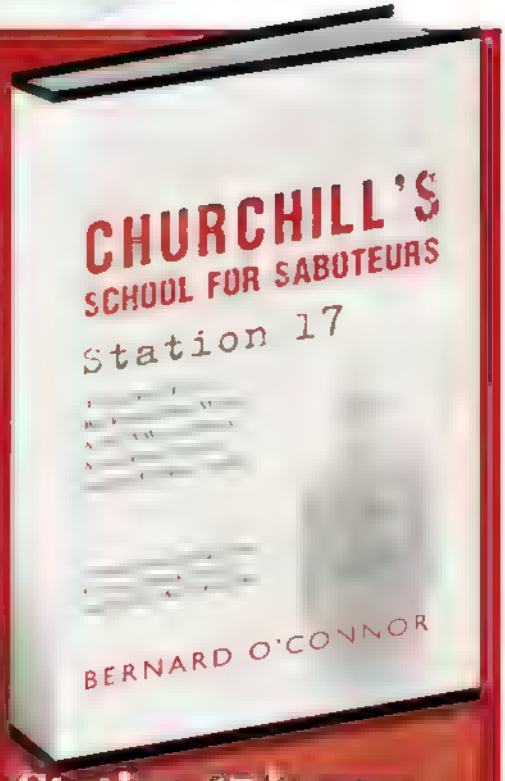
Subtitled *The Secret Life of Brickendonbury Manor And The WWII Assassins And Saboteurs Who Set Occupied Europe Alight*, this is a fascinating account of British intelligence's main training facility and the secret agents who graduated from it.

Set up not long after hostilities began at the behest of Guy Burgess (who would, of course, later go on to become one of Britain's most-notorious Cold War double agents) the Brickendonbury facility went under the name of Station 17. Although a far more prosaic moniker than "Guy Fawkes school" (which Burgess had initially suggested) what went on at Station 17 remains one of the great stories of World War II.

O'Connor's fascinating book takes us into a world of pipe-smoking chaps devising ingenious ways to blow up railways, ships and major engineering works in Nazi-occupied Europe, all from the safety and splendour of a Hertfordshire stately home. But it also takes us on some of the extraordinary missions Station 17 prepared its Special Operations Executive agents for, including the assassination of SS Chief Heydrich in Czechoslovakia, the destruction of the Peugeot factory at Sochaux in France, as well as the destruction of heavy water supplies at Vemork in Norway. The famous Telemark raids, as they came to be known, prevented Hitler from developing a nuclear bomb and were arguably the SOE's greatest contribution to the war effort.

Packed with first-hand accounts from many of those who learnt the dark arts of sabotage at the school, O'Connor also weaves plenty of once top-secret documents into his tale to give us an insight into the training, the dedication and indeed the courage required of the men and women sent to "set Europe alight" as Churchill had ordered them to.

Most of the SOE's big names are present, with the remarkable Harry Rée, Telemark hero Knut Haukelid as well as Heydrich's ill-fated assassins Gabcik and Kubis all brought brilliantly to life. Quite simply, this is military history at its most fascinating and thrilling.



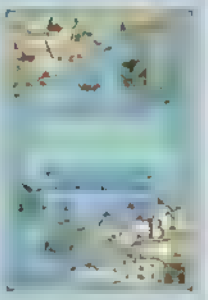

**"What went on at Station 17 is one of the great stories of WWII"**

## ALL ABOUT HISTORY RECOMMENDED READING

### IN 1867: BANANAS & CUSTER (SELF-PUBLISHED)

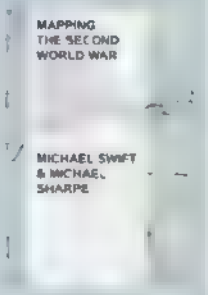
Brimming with trivia, maps, newspaper clippings and images, innovative iBook *Bananas & Custer* peels apart one of the pivital years in history to reveal the juicy fruit within. Find out more at www.in1876.com.

### MERCHANT ADVENTURERS (WEIDENFELD & NICOLSON)



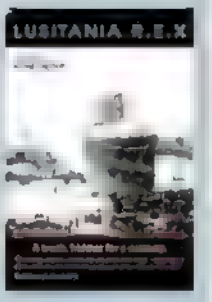
A awe-inspiring voyage of discovery, James Evans' *Merchant Adventurers* follows an overlooked episode in 16th Century seafaring, taking the reader from Ivan the Terrible's court to the frozen North Pacific.

### MAPPING THE SECOND WORLD WAR (CONWAY)




A fascinating document for any historian, Michael Swift and Michael Sharpe's *Mapping The Second World War* takes you high above the battlefield through the eyes of the meticulous military cartographer.

### LUSITANIA R.E.X (FILAMENT PUBLISHING)




Historical fiction's answer to *Titanic*, Greg Taylor's *Lusitania R.E.X* adds a narrative flourish to first hand research and explores the final voyage of ill-fated passenger liner and the theories behind the sinking.

### ARTILLERY SCOUT (CASEMATE)

A rare intimate examination of the US experience in World War I, James G Bilder's *Artillery Scout* explores the blood-soaked Western Front through the eyes of his grandfather - an artillery spotter in the US Army.

# A BOX OF SAND: THE ITALO-OTTOMAN WAR 1911-1912

**Author Charles Stephenson £14.99, Publisher Tattered Flag**

More than an overlooked scrap in that supposed pre-war idyll, *A Box Of Sand: The Italo-Ottoman War 1911 1912* makes a good case for viewing the conflict as a full blown preamble to World War I.

Following up a run through of Italy's troubled unification with the steady march towards a North African war, from the moment that a potential invasion of Ottoman-held Libya is mooted all the players are aware of the instability this will cause in the Balkans, where Greece, Serbia and Bulgaria are chomping at the bit to seize more territory from the waning Turkish empire, and the distress that this will cause Austria-Hungary – the power with the most to lose from a territorial feeding frenzy in South East Europe

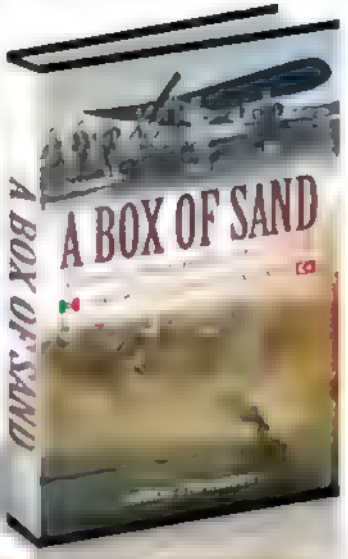
Britain too has a role to play, never opposing Italian aggression (in order to lure the 'least of the great powers' away from her Central European allies Germany and Austria-Hungary), while offering a fig leaf of support to the Ottomans in order to mollify the Muslim population of the Empire. It's this Quixotic – and deeply cynical - attitude to conflict that doubtless emboldened the Germans in their view that Britain would never stand by its French alliance in 1914.

Drawing from copious Italian, Turkish and other European sources, Stephenson's breadth and depth of detail paints as compelling a picture as you're likely to find, from the debut of aerial warfare to the awkward alliance between Turkish modernisers (among them Mustafa Kemal – the future Atatürk) and fanatical Berber tribesmen.

Over a century on from the start of hostilities, it's more essential than ever to understand the web of national interests, rivalries and ambitions that dragged the world into World War. *A Box Of Sand*, then, is absolutely invaluable.

## "A Box Of Sand makes a good case for the conflict as a preamble to WWI"

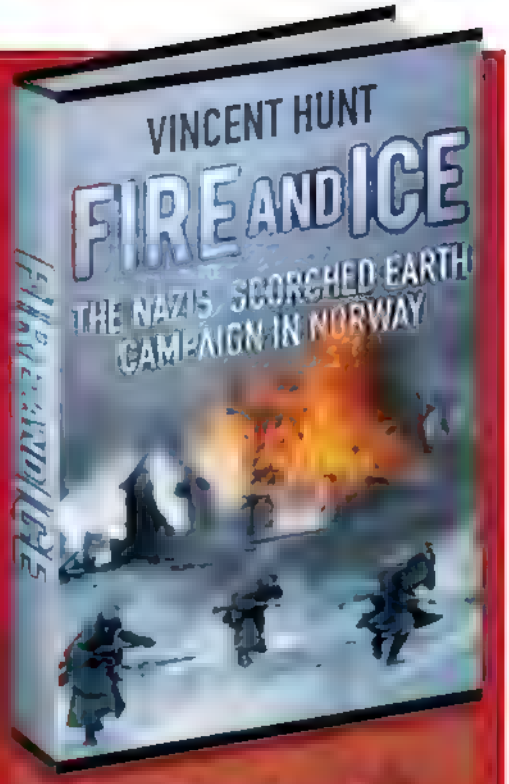
*The Ottoman gunboat Bafra sunk by the Italian navy in the Red Sea.*



*A sunken Ottoman torpedo boat after the Battle of Beruit, February 1912.*

# FIRE AND ICE: THE NAZIS' SCORCHED EARTH CAMPAIGN IN NORWAY

**Author** Vincent Hunt **£20 Publisher** The History Press




Just when it seems every story from the World War II has been recounted one hundred times over, a book like *Fire And Ice* arrives. From it comes a series of gripping tales, set in a time and place that is often overlooked in popular WWII lore: the Nazis' destructive retreat from Norway in 1944, during which Hitler ordered everything that might be used by the Soviets destroyed – the result was docks, bridges, entire towns torched and loaded with dynamite, devastating vast areas of the country. "1944 is year zero here," says one of the book's interviewees. "Everything was burned."

The background and story is enough to make this worth picking up for anyone with anything more than a passing interest in military history, this is absolutely essential reading. The book's major strength is its meticulous research. That should come as no surprise: author Vincent Hunt is a well-regarded journalist and filmmaker, and his efforts have paid off.

*Fire And Ice* is packed with detail, delving deep into the Nazi campaign against Norway and its people, and the forensic examination of it at the Nuremberg Trials. But what's particularly intriguing is the human story that unfolds. Hunt interviews many people along the way, uncovering tales of murdered relatives, prisoners of war forced into cannibalism, and communities torn apart.

The Nazis' efforts during their retreat was devastating; the lasting effects have been equally so, passing down generations and giving Hunt's interviews a sense of brutal immediacy – as if these events are still fresh, are yet to be fully understood in this part of Europe and have not yet been laid to rest.

Hunt's book is a huge success. Dense with superlative research, it will reveal a whole new side of WWII for many readers – one that's overdue in being told in such detail.

**"What's particularly intriguing is the human story that unfolds"**

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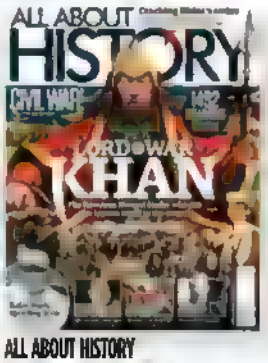


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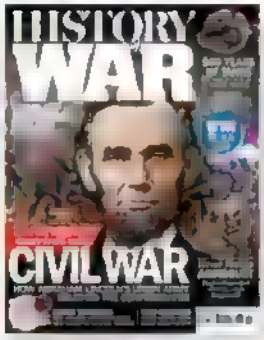


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# WAR IN NUMBERS

# THE SEA HARRIER

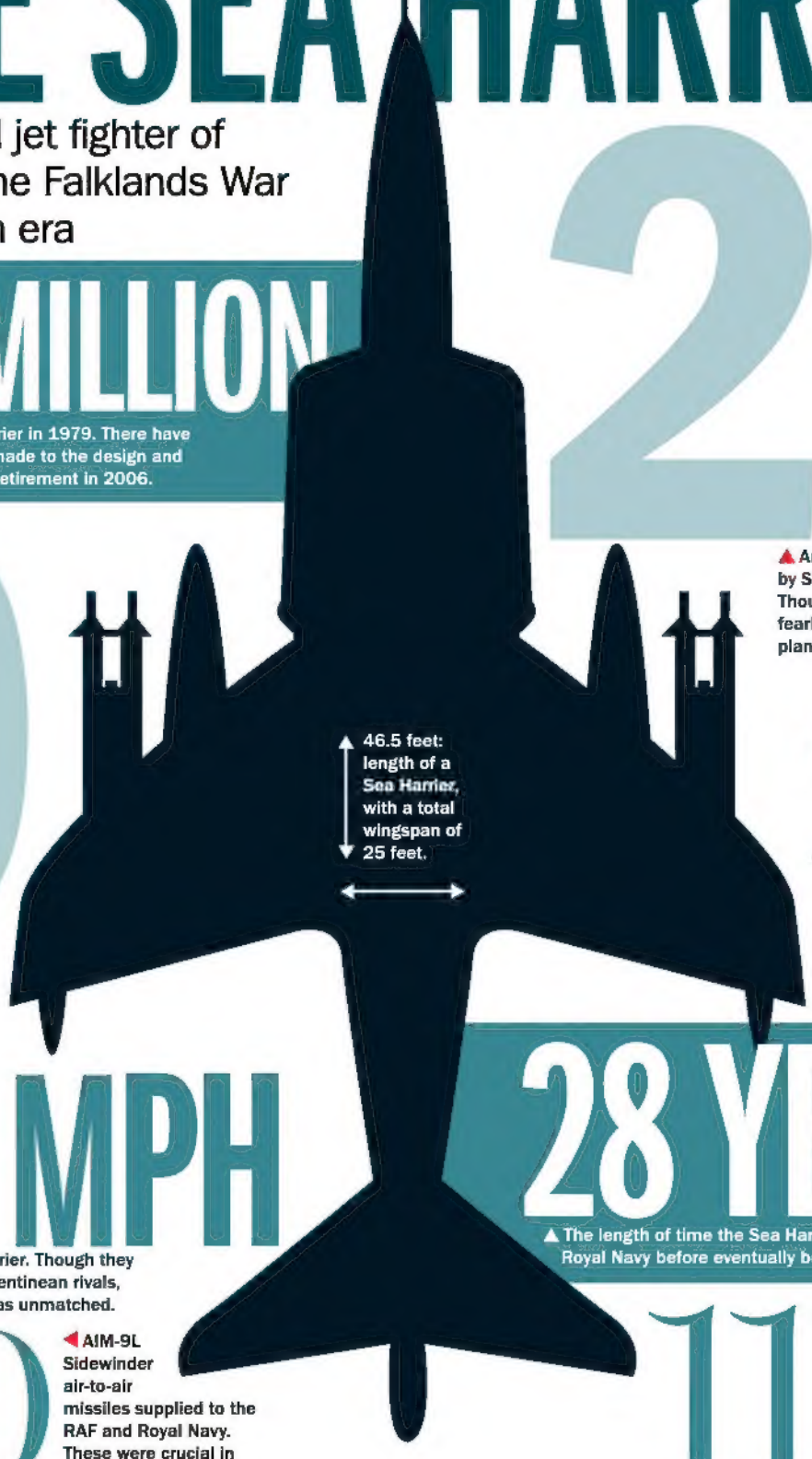
The advanced jet fighter of choice from the Falklands War to the modern era

## £12 MILLION

▲ The unit cost of a Sea Harrier in 1979. There have been several improvements made to the design and electronics of the beyond its retirement in 2006.

## 21

▲ Argentinean aircraft shot down by Sea Harriers during the conflict. Though Argentinean pilots were fearless and highly skilled, their planes were inferior to the harriers.




## 0

▲ Sea Harriers lost to air combat during the Falklands War. However, 6 were lost to ground fire and accidents.

## 23

▲ Sea Harrier FRS.51s were delivered to the Indian Navy in 1983 and upgraded versions of the planes are still operated by Indian pilots today.

## 736 MPH

▲ The top speed of a Sea Harrier. Though they were far slower than their Argentinean rivals, their sidewinder armament was unmatched.

## 28 YEARS

▲ The length of time the Sea Harrier served in the RAF and Royal Navy before eventually being retired in 2006.

## 100

◀ AIM-9L Sidewinder air-to-air missiles supplied to the RAF and Royal Navy. These were crucial in winning air superiority.

## 111

◀ The number of Sea Harriers built to date, including the more-advanced FA2. This features superior weapons and navigation.

# Events 2015

1066 country

Images by Bob Mazzer & Chris Parker

www.visit1066country.com/events

## February

Rye Bay Scallop Week

## May

Hastings, Jack in the Green

Battle Medieval Fayre

## June

Great War Weekend, Kent & East Sussex Railway

## August

Herstmonceux Medieval Festival

Bodiam Castle Grand Medieval Weekend

## September

Bexhill Festival of the Sea

Hastings Seafood & Wine Festival

## October

Hastings Bonfire & Torchlight Procession

Battle, Re-enactment of the Battle of Hastings

Rye, Wild Boar Week, Festival of Game

## November

Hastings Herring Fair

Sussex Bonfire & Torchlight Processions, Rye & Robertsbridge

**Battle >> Bexhill >> Hastings >> Herstmonceux >> Pevensey >> Rye**

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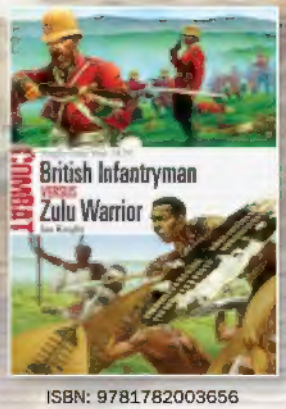


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